Community Participation and Infrastructure Development: A Case Study of Akure City, Nigeria.

A Thesis submitted for the Degree of
Doctor of Philosophy

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Abstract

Infrastructure development is the bedrock of any economy and it is an important factor for the improvement of wellbeing and quality of life. Many nations are struggling with meeting the increasing demands for infrastructure while local communities are devising different approaches to meeting supply. However, the focus of the Nigerian government is more towards the development of the urban and rural areas while the suburban areas are often neglected.

The aim of the study is to assess the impact of community participation on infrastructure development in Akure, Nigeria. The study was carried out to understand how community participation contributed to adequacy of infrastructure development in the suburban areas of a medium size city, and was carried out in five suburban communities within Akure city, Nigeria. Using a range of qualitative methods, the study examined the role of government in the provision of road and water infrastructure in the selected suburban communities. It also examined the participation of the local residents and contribution of community self-help projects to adequacy of infrastructure development in these communities.

The study established that a multi-organisation and sectorial approach was adopted for the planning for road and water infrastructure development in Akure city withe more emphasis placed on provision of infrastructure in the urban and rural areas. There are overlapping responsibilities as regulatory institutions are also the major providers of road and water infrastructure in Akure suburban area. The study further revealed the preference of top-down approach to infrastructure development as only few agencies make use of bottom-up approach while there is no collaboration between the state-based and local-based agencies and neither with the regulating agencies.

Lastly the study showed that community self-help projects contributed to the adequacy of road and water infrastructure. Community participation contributed more to availability, accessibility and affordability of road and water infrastructure while the qualities remain poor and not improved. Water infrastructure was more on individual basis while road projects are through collective actions.

Dedication

This work is dedicated to God the Father of all creation

And

To the memory of my late father Richard John Omotayo Ogunmakin

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I thank my Great and Loving Father, the Omnipotent God, My strength, my help and sustainer. The one who has given me the Grace, Courage and strength to complete this journey. Unto him be all the Glory, Honour and Adoration.

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Above all, I thank God for everything!

List of Acronyms and Abbreviations

ABCD	Asset-Based Community Development
AKSLG	Akure South Local Government
BPE	Bureau of Public Enterprises
BPMU	Bureau of Project Monitoring Unit
CBO	Community Based Organisation
CBUDA	Community Based Urban Development Agency
CDA	Community Development Association
CDD	Community driven development
CBUDP	Ondo State Community Based Urban Development Projects
CSDA	Ondo State Community and Social Development Agency
CSDP	Community and Social Development Project
DFID	Department for International Development
FCT	Federal Capital Authority Abuja
FERMA	Federal Roads Maintenance Agency)
FGN	Federal Government of Nigeria
FHWA	Federal Highway Administration
FMW	Federal Ministry of Works
FMWR	Federal Ministry of Water Resources
FUTA	Federal University of Technology Akure, Ondo State
GRA	Government residential Area
IDF	Infrastructure Development Fund
IPA	International Planning Associates
IUIDP	Integrated Urban Infrastructure Development Programme
JMP	Joint Monitoring Programme
LEEDS	Local Economic Empowerment and Development Strategy NPDP - National Physical Development
LGDO	Local Government Development Officers
LGRC	Local Government Review Committees
MCDC	Ondo State Ministry of Community Development and Cooperative
MDA	Ministries, Departments and Agencies

NEEDS	National Economic Empowerment and Development Strategy
NGO	Non-Governmental Organisations
NIIMP	National Integrated Infrastructure Master Plan
NPC	National Population Commission
ODSDEP	Ondo State Development and Economic Plan
ODSG	Ondo State Government
ODSEEDS	Ondo State Economic Empowerment and Development Strategy
OSARMCO	Ondo State Agency for Road Maintenance and Maintenance
OSDPC	Ondo State Property Development Corporation
OSMLHS	Ondo State Ministry of Land and Housing Services
OSMPPUD	Ondo State Ministry of Physical Planning and Urban Development
OSMW	Ondo State Ministry of Works
OSWC	Ondo State Water Corporation
PRA	Participatory Rural Appraisals
PPA	Participatory Poverty Assessments
RBDA	River Basin Development Authorities
SEEDS	State Economic Empowerment and Development Strategy
SWA	State Water Agencies
UNDP	United Nations Development Program
USAID	United States Agency for International Development.
UNICEF	United Nations International Children's Emergency Fund
WHO.	World Health Organization

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Chapter 1. Introduction

1.1 Living in Suburban Areas

The rapid growth of most urban centres in Nigeria is progressively leading to the transformation of built-up areas with commercial properties replacing other land uses (Aluko, 2003). This is resulting in increasing relocation of people and activities from urban centres to sub-urban areas which are less congested. These suburban areas are becoming buffer zones for urban dwellers and migrants seeking cheaper alternative residential accommodation. However, many of these suburban areas in Nigeria are unplanned development layouts without infrastructure, as the majority were converted rural lands that were formerly used for agricultural purpose (Oyinloye, 2014).

Living with inadequate infrastructure is a reality that must not be overlooked. Infrastructure is the bane of any development and it is an important measure of quality of life. There are economic and social facilities crucial to creating enabling environments for economic growth and improved quality of life (Yazdani *et al.*, 2015). In most countries, the provision of infrastructure is primarily the responsibility of the government, but due to rapid urbanisation and insufficient funding, there is a wide gap between the supply and demand of infrastructure facilities which poses serious consequences for economic and social development in Nigeria (WorldBank, 2004). This gap is also attributed to the poor institutional framework, as government's effort are concentrated in urban and rural areas at the expense of the suburban areas. However, currently in Akure, the gap is filled with community self-help projects, where local communities resort to self-provision of infrastructural facilities through contributions and direct labour.

This research assesses the impact of community participation on infrastructural provisions in suburban areas of Akure, a medium sized city in Nigeria. It examines the different roles of government and community in the provision of infrastructural facilities, the processes/approaches involved in their provision, the adequacy of the infrastructural facilities provided, factors influencing their provision and how the facilities and the provision can be improved. This was with a view of ensuring sustainable infrastructure development in the study area. The study was motivated by the researcher having lived and studied within the suburban community of Akure city

and had witnessed some of the changes that took place in this area of the city. I was motivated to examine the contribution of community self-help projects to the infrastructure provision and development of the suburban area of Akure city and also what influences the local residents' participation even though many of the residents are not homeowners.

I therefore undertook a study on community participation in infrastructure development in Nigeria with particular reference to the approaches of community participation (process) and the ways in which infrastructure provision are improved (outcome). The thesis of this research is about community participation in infrastructure provision, the processes of its provision, factors influencing their participation, effects of this provision to the community and government's involvement in infrastructural provision. This chapter provides the background to the study, the research setting, aims and objectives, research study, scope, justification, limitation and outline of the thesis.

1.2 Research Setting

The research setting is Akure city, a medium sized city in South-Western Nigeria and it is the state capital of Ondo State. Ondo state is one of the thirty-seven states in Nigeria (see Figure 1.1) and was created in 1976. Akure city was chosen as the study area because it was one of the selected Millennium Development Cities. The initiative aimed at improving access of urban poor to infrastructure facilities in order to improve their quality of life. The city has benefitted from the Millennium Cities Initiative Project of the United Nations Development Program (UNDP) through its provision of infrastructural facilities in the core area of Akure city. Akure is a traditional city which developed from a small settlement with no definite and conscious planning from its inception just like most cities in Nigeria. Akure has been in existence long before the advent of British colonial rule.

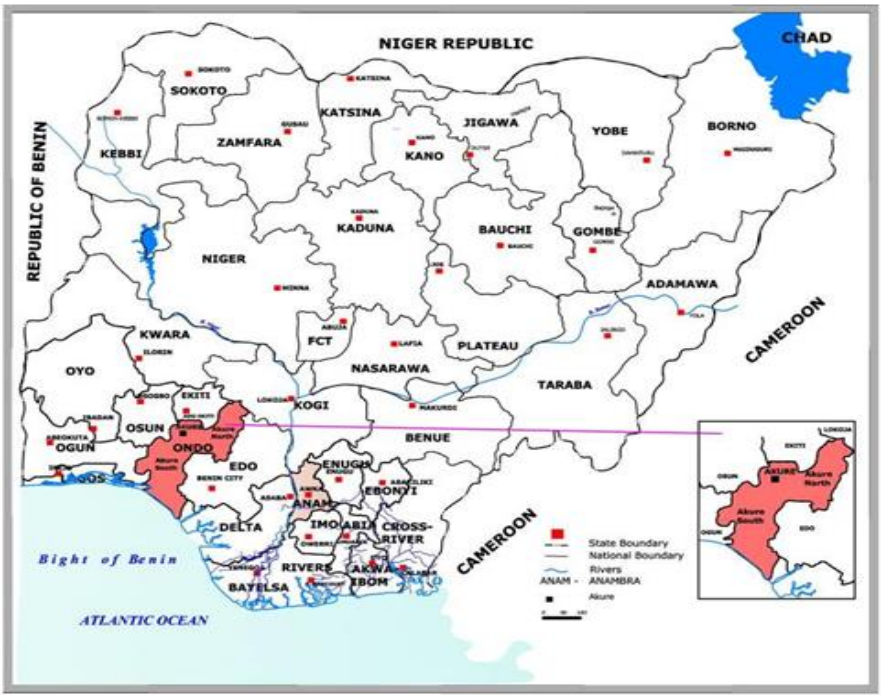

Figure 1. 1: The Map of Nigeria Showing Ondo State
Source: Rotowa et al. (2015, p. 186)

Ondo state is made up of 18 local government councils (see figure 1.2) and is situated approximately 311 kilometres northeast of Lagos State, 700 kilometres southwest of Abuja the capital of Nigeria and lies at 370 meters above the sea level. Akure city in Akure South Local Government Area which covers approximately 25 square kilometres as shown in figure 1.3.

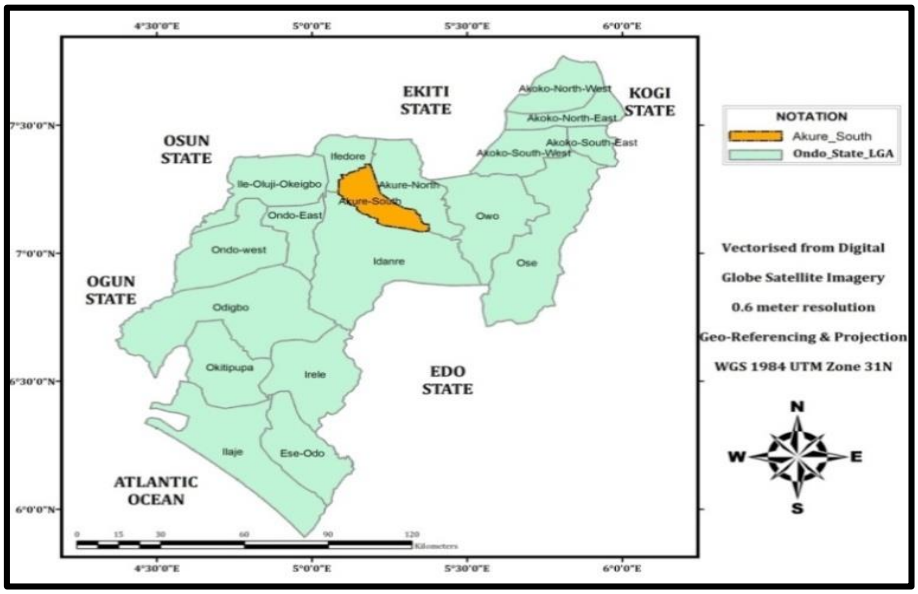

Figure 1. 2: Map of Ondo State Showing Akure City and Other Local Governments
Source: Olamiju and Oyinloye (2015, p. 123)

Akure city has witnessed a rapid increase in its population and immense growth in the size of built-up areas which has been predominantly within the last 39 years (Oyinloye, 2014). The population has increased from 38,852 in 1952 to 239,124 in 1991. The last population census in 2006 put the population of Akure at 340,021 and was projected to increase to 1.8 million by 2015 (National Population Commission, 2006). The annual growth of Akure is estimated to increase more than 5% and it is largely attributed to its role as administrative and centre of economic activities. Also Ondo state which is an oil producing state has witnessed an influx of economic activities and also attracted a large spectrum of migrant workers from the neighbouring states to Akure city in search of employment.

The land use configuration of Akure city is a stereotype of most traditional cities in Nigeria. The King's palace and market are located in the city core with some public offices such as the post office, maternity centre, city hall and local government council offices. The city centre is characterised by commercial and partly residential land use pattern, while the suburban areas are predominantly residential with a mixture of industrial and recreational developments. Residential land use occupies more than 65% of the land area of Akure; there are sizeable numbers of private layouts and government housing estates as well. There are over 1050 registered private residential layout as against 10 government residential areas however more than half and all government residential layouts are located in the suburban areas of the city. These layouts are subject to town planning authority's approval based on approved zoning plan of the city, although there are also unaccounted informal layouts within the suburban areas. However, all the selected communities for the study were formal settlements located in registered layouts. Also all the tertiary institutions are ~~also~~ located in the suburban areas - the Federal University Technology, Federal College of Agriculture, School of Nursing and Midwifery and School of Health Technology. Each of these tertiary institutions influences residential and infrastructure developments around their locations.

The rapid pace of development in the city within the last three decades has had untold effect on the pattern of land-use and infrastructure development (Oyinloye, 2014). The expansion of Akure as a result of rapid urbanisation resulted in increasing demand for residential properties. Most agriculture and forest land in the periphery of the city has been converted into residential settlements which subsequently resulted in

uncontrolled residential development with inadequate infrastructure provision. The slow response of the state and local governments to the demand for infrastructure development led to the involvement of residents in the provision of infrastructural facilities. This was done in order to provide a solution to infrastructure shortage in their communities.

1.3 Infrastructure Development and Community Participation

Infrastructure development is the provision of physical facilities which is crucial to creating an enabling environment for economic growth and improvement of quality of life (Ennis, 2003; Prudhomme, 2004). They are also considered as an intertwined systematic framework which underpins all human activities, productivities and social equities. There are different types of classification which includes economic and social, hard and soft, core and not-core, basic and complementary, network, and territory infrastructures. Others include; communications, transport, water, and energy supply infrastructure (Rietveld *et al.*, 2001; Mueller, 2003; Black *et al.*, 2005; Rosen, 2005; Fourie, 2006). Each type of infrastructure is important and there is need for adequate provision. However, what is adequate? There is ambiguity in determining what is adequate. Four major factors were used to assess the adequacy of infrastructure in this study. They are: availability, accessibility, affordability and quality. Each of these factors refers to different levels of provision.

Traditionally, the provision of infrastructure has always been the primary responsibility of the central government, as most infrastructure development in many countries are owned and operated by the public sector. Most governments are responsible for whichever approach is adopted for the provision and financing of infrastructure development. There are two main approaches to infrastructure development, they are public and private provision. The more common approach is the public provision which is strongly influenced by government's ideology. Public infrastructure provision could be centralised or decentralised depending on the different subnational governments responsible for its provision. However, private provision is gradually gaining ground in developing countries because of government failure caused by dwindled resources, under-pricing, low productivity, poor service delivery and lack of transparency (WorldBank, 2004).

Moreover, many nations are gradually increasing private sector investment in the provision and management of infrastructure development through privatisation of different infrastructure sectors in order to increase the supply of infrastructure to cope with increasing demand. Private sector involvement includes public-private partnership, Non-government organisation and community participation among others. Irrespective of the approaches adopted by central or subnational governments, infrastructure provision will be hindered if finance is lacking. This prompts the need for private sector participation in infrastructure provisioning. Furthermore, many developing countries are seeking new initiatives in promoting private and foreign interest due to poor performance of state monopolies and rapid globalization of world economies which illuminated the economic costs of inadequate infrastructure. Many developing countries are increasingly dependent on financial assistance from external agencies and international donors some of which are enforcing the involvement of local communities and projects recipient in their policies and framework. Many international aid donors such as the World Bank and UK's Department for International Development (DFID) are encouraging the institutionalising of community participation as a way of ensuring the sustainability of infrastructure provided and the empowerment of local community in its provision.

Community participation is defined as the involvement of service users in the decision and implementation of projects within their local community. It is the involvement of the local people in the decision process, and the implementation of infrastructure projects in their neighbourhood. Paul (1987) Considers community participation as an instrument of empowerment. He is of the opinion that development should lead to an equitable sharing of power between the weaker groups and the elite by increasing the weaker group's political awareness and strengths. This aligns with Arnstein's definition of the concept of community participation *as "the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future"* (Arnstein, 1969, p. 216). The objectives of community participation include efficiency, empowerment, beneficiary's capacity building, sharing of cost and effectiveness of the project. Community participation is an approach that allows people to have a say regarding their needs and taking ownership of local projects. However, the success of community participation initiatives depends on the available structure and strategies since community participation is about initiation of action, decision-making, consultation and sharing of information.

The structure for community participation initiatives could be instituted by external agencies or it could be the existing traditional groups like community based organisation, women groups etc. There are different strategies for implementing community participation which includes community driven development, community self-help programmes. Community driven development (CDD) initiatives could either be asset-based community development (ABCD) or needs-based community development. On the other hand, community self-help projects could either be individual or collective efforts. Nevertheless, whatever the strategies of community participation initiatives, they all involve participatory development approaches which is the willing participation of relevant stakeholders. However, the motive for participations is of utmost importance in order to ascertain whether community participation is true participation or just a way of government rubber stamping development programmes. This is particularly relevant if the participation is initiated by external aid agencies such as government. How effective is the involvement of local community in the process of infrastructure development and can it lead to adequate provision?

This study aims to examine the contribution of community participation to infrastructure development. It also examines the underlying causes of success and failure of community participation projects by assessing the environment within which decisions and actions concerning self-help projects take place. The study also examines the means used to carry out participation with emphasis on the relationships between government and Community Based Organisations (CBOs) and the community leaders and the residents/members of communities.

1.4 Problem Statement

The top-down approach is the prevalent approach adopted by the Nigerian government for the provision of infrastructure development and there is a general expectation by most Nigerian citizens that government must always meet all their needs, infrastructure included. However, in the face of dwindling resources, this is proving difficult due to lack of finance. The top-down approach was adopted by the Nigerian government in an attempt to increase the provision of basic infrastructure facilities and also to encourage uniform growth and economic development across all regions. However the approach is not delivering adequate infrastructure development nor uniform development, rather more effort are concentrated in the urban centres to the neglect of the other parts (Olukotun, 2008). This reduces the confidence and trust of *the*

Nigerian people in central authority's commitment and ability to provide adequate infrastructure.

This inability of the Nigerian government at meeting infrastructure demands in the sub-urban area engendered many ideas of self-help initiatives and programmes. Sub-urban residents and communities sought relief by providing the needed infrastructure development through the indigenous methods which are associated with community participation while waiting for government intervention. They adopt a community participation approach which refers to the process where people living in the same community participate voluntarily in community development projects. It is a process by which community groups, individuals and government agencies work together in formal or informal partnerships to make life and their environment better. Oduwaye (2006), explained that the principle employed is based on the people's understanding of the fact that government resources are limited, hence the need to come together as a group so as to improve their chances of success.

Prior to the onset of urban planning in Nigeria communities used to engage in communal efforts as a mechanism for mobilization of community resources; provision of physical improvement and functional facilities in order to improve their socio-political and economic aspects of their lives. Community participation is not a strange approach rather it is an existing local approach that is being introduced into formal method of infrastructure provision. Participation ensures that everyone is involved which includes the responsibilities for the management of the facilities in order to ensure its sustainability. Olukotun (2008), sees participation as a new visualisation that ensures that the local communities are in control of the development of their communities. This gives them the needed impetus of proprietorship that will enable them to guarantee the sustainability of communal projects. Olutokun (Ibid.) further claims that the involvement of local people must start right from the project formulation, design and implementation stage as this will lead to equitable distribution of the projects benefit and sustainability.

Community participation gives stakeholders the control of development initiatives and the decisions that affects them (WorldBank, 1994). However, does community participation lead to adequate infrastructure development? Can it guarantee success and sustainability? Community participation as an approach requires commitment from the people for it to lead to project efficiency and empowerment. Although community

participation alone cannot guarantee success as infrastructure development involves huge capital outlay. It can however ensure that the real need of the local communities is met and not what was designed by government or outside stakeholders and thus improves the effectiveness of developments project. It is important that the actual needs of the people are met and not what is conceived and provided by government and politicians as the objectives of community participation are viewed as an active process. This includes empowerment of individuals in the community; building beneficiary's capacity; increasing project effectiveness; efficiency and cost sharing, information sharing, consultation, decision making and initiating action (Dongier *et al.*, 2003). Therefore, development begins with the people who understand their needs better than any other person does and by participation they would be better able to determine the provisioning of their infrastructure needs.

This study therefore seeks to assess the contribution of community participation to infrastructure development in the sub-urban area of Akure city. It examines various methods employed in the provision of infrastructure and factors that influence community participation in the study area. The scope of the research is however limited to road and water infrastructure due to their importance to development and economic production and the need to get in-depth knowledge of community participation within the time frame available for the study. Road and water infrastructures are basic infrastructure that are necessary for the simple things of life and cannot be overlooked as they serve as the base for the development of other types of infrastructure.

1.5 Research Aims, Objectives and Questions

The overall aim is to assess the impact of community participation on infrastructure development in suburban areas. This research hopes to provide an understanding to the approaches, challenges and outcomes of community participation to infrastructure development. The key research questions are shown in table 1.1 below;

Table 1. 1: Research Questions

Main Questions	Sub-questions
1. What are the process and approaches to infrastructure development and what is the existing institutional framework in Akure city?	1. What is infrastructure development and what are the different approaches to infrastructure provision? 2. How can the adequacy of infrastructure development be assessed? 3. What are the roles and responsibilities of government in the provision of infrastructure development in the study area? 4. What is the current situation of infrastructure development in the study area and the level of community involvement in infrastructure provisions?
2. To what extent does community participation contribute towards the provision of adequate infrastructure development in Akure suburban area, Nigeria?	5. What are the different models of community participation and how are they applicable to infrastructure development? 6. How does the local community understand the concepts of community participation? 7. What are the roles of the community in the provision of infrastructure in the study area? 8. How can community participation contribute to adequacy of infrastructure provision and how can it be sustained?

The following objectives of this study are:

1. To investigate the concepts of infrastructure and infrastructure development so as to develop a method of assessing the adequacy of provision in Akure city.
2. To examine the concept of community participation and the various existing typologies of community participation in relation to infrastructure development
3. To investigate the existing institutional framework for infrastructure development in Akure city in order to understand the role and responsibilities of government agencies and their contribution to adequate infrastructure provision in the study area.
4. To investigate the process and approaches of the community response to their local infrastructure need and the contribution of community self-help projects to adequacy of infrastructure development in Akure city.

5. To make recommendations on how to improve community participation and the adequacy of infrastructure provision in Akure city.

1.6 Research Strategy

The need to explore the contribution of community participation in the provision of adequate infrastructure within Akure suburban community led to the development of a conceptual framework, this is examined inductively by empirical study. The study draws on qualitative approach with the use of semi-structured interviews, focus group discussions, observations and review of documents. The use of complementary methods involved interprevist and critical ways of assessing the approaches to infrastructure development and community participation. It also assisted in assessing the role of different stakeholders involved in provision of infrastructure within the case study. Table 1.2 shows the sources of evidence for the research.

Table 1. 2: Sources of Evidence

	RESEARCH QUESTION	SOURCE OF EVIDENCE
1	What is infrastructure development and what are the different approaches to infrastructure provision?	• Literature review
2	How can the adequacy of infrastructure development be assessed?	
3	What are the roles and responsibilities of different agencies involved in the provision of infrastructure development in Akure?	• Semi-structured interviews (Key Government Officials, Community and CBOs leaders) • Records review • Focus Group Discussion • Field Observation
4	What is the current situation of infrastructure development in Akure and the level of community involvement public infrastructure projects?	
5	What are the different models of community participation and how are they applicable to infrastructure development?	• Literature review
6	How does the local community understand the concepts of community participation?	• Semi-structured interviews (|Household heads, Community and CBOs leaders) • Direct observation • Focus Group Discussion • Field Observation • Record Review and Document Collection
7	What is the role of the community in the provision of infrastructure development in Akure?	
8	How community participation does contribute to adequacy of infrastructure provision and how can it be sustained?	

Semi-structured interviews were conducted with the major stakeholders involved in infrastructure development in the case study, this includes residents, community leaders, CBO leaders, and government officials. Focus group discussions was also conducted among academics, CBO and women organisations in the study area in

order to understand the perception of participants on the concept, approach and factor influencing community participation in infrastructure development. The involvement of women and other vulnerable groups were also discussed. The research process is cyclic than linear (Trochim, 2006; Ahmed, 2011). In order to understand community participation process within the study area, observation techniques and interview outcomes were used in combination with field survey and document information. Observation techniques were used to gain an understanding of the collective decision-making process and mode of operation of the CBO while photos were used to show the infrastructure provided and the state of the maintenance.

1.7 Justification for the Research

In an attempt to proffer solution to the problem of the inadequate infrastructural provision, the notion of community participation reappeared in discussions around the need to bring local services and facilities more directly into the control of local people. Many key government and international agencies such as the United Nations and World Bank advocate the advantages of community participation and the fact that many governments especially in the developing countries can no longer solely handle the responsibility of the provisioning of infrastructural facilities for the people. Community participation is expected to complement government efforts and advance infrastructure development by the ingenuity of local communities. Furthermore Nelson and Wright (1995) enunciated that most participatory approaches are often dichotomised into means/ends classifications and process that increases the ability of an individual to improve his/her live.

Some authors also criticised participation as subjective, problematic, time wasting and that the processes do not often meet expectations (Brett, 1996; Leach *et al.*, 1997; Friedman, 1998; Michnener, 1998; Agrawal and Gibson, 1999; Dreyer, 1999; Hagg, 1999). Golooba-Mutebi (2004), further argued that participation places untold demand on participants and sometimes restricts their capacity to explore personal interests. They usually have diverse preferences even though they are involved in community participation, but in most cases they are influenced by the actions of others. However, community participation requires commitment from participants but does not guarantee success even though it is expected to lead empowerment of participants and effectiveness of project. It can play a vital role in ensuring that local people's rights are upheld and the needs met and they will no longer be endorsees of pre-designed

planning programmes. In most developing countries, recipient communities are often the objects of administrative manipulation and top-down policies. What obtains in reality is the imposition of the opinion, policies and projects by the bureaucratic elites and government officials which sometimes lead to abandonment or underutilisation.

Furthermore, Choguill (1996a) is of the opinion that community involvement and ownership of projects can lead to improved revenue generation and better management. Likewise is the need to involve the local communities in the formulation and implementation of projects and it involves the mobilization of identification of communal need, people and material resources and its start with identification of local needs which is described by Oyesiku (1998) as an active process. The question is whether participation does lead to a desired outcome? There is a need to clarify what participation entails in order to understand the complexities of participation, most especially regarding its failures.

This study examines the implementation of community participation in Nigeria where top-down approach to public infrastructure development is most preferred. It also provides understanding of the process and factors influencing community participation and choice of participants and the impact on infrastructure development in Akure city. The study hopes to assist policy makers to understand the importance of “people-initiative programmes” and involvement of local community residents in infrastructure development projects. Participatory development allows stakeholders to work together and learn from each other in order to achieve adequate infrastructure provision. Government and community leaders must be accommodative, transparent and accountable with emphasis placed on collective needs and not just policies or personal interest. Furthermore it is important to encourage bottom-up approach to development planning as against the popular top-down approach otherwise sustainable development may be an illusion (Olukotun, 2008). Lastly, this study hopes to contribute to the existing pool of knowledge on community participation.

1.8 Structure of the Thesis

Having introduced the subject area and the key research questions to be examined in this chapter, the next chapter reviews relevant literature on infrastructure development and the various approaches to infrastructure development. This will enable the situation of this study within the context of extant literature as well as identify key issues

and challenges. The chapter also focuses on the overview of infrastructure development in Akure in order to identify present challenges in the provision of road and water infrastructure in Akure. Chapter three reviews literature on the meaning of community and the various debates around community participation which includes the various models and approaches to community and their outcomes. The chapter also includes the identification and discussion on the theories underpinning this research.

Chapter four sets out the research methodology. The logic for the choice of a qualitative case study design for the research and the nature of data collected is discussed. Chapter five presents the findings on roles and responsibilities of government agencies regarding infrastructure provision in Akure. Chapter six presents findings on government provision of road and water infrastructure in the case study. Chapter seven is the presentation of findings on contribution of community self-help projects to adequate infrastructure provision. Chapter eight is the discussion of findings on the impact of community participation on infrastructure development while chapter nine is the conclusion and recommendation.

Chapter 2. Infrastructure Development

2.1 Introduction

This chapter provides a general background on infrastructure development in order to understand the concept, classification, and relationship with economic growth and urbanisation. The chapter will also review various approaches and sources of finance for infrastructure provision.

2.2 Definition and Classification of Infrastructure Development

2.2.1 Definition of Infrastructure Development

Infrastructure development is the provision of physical facilities which provides services that are consumed by the end users. It is also generally defined based on taxonomy such as communications infrastructure, water infrastructure (Rietveld *et al.*, 2001; Mueller, 2003; Black *et al.*, 2005; Rosen, 2005; Fourie, 2006). Graham (2000), defined infrastructure development as "the mediators between 'nature' and the production of the city". They are intertwined systematic framework which underpins the productivity of human activities and social equity. They are also considered as multifaceted technical, political and economic systems that offer essential and critical services to society (Hughes, 1987; Kaijser, 2004; Finger *et al.*, 2005; Jonsson, 2005; Markard, 2009). Ennis (2003) and Yazdani *et al.* (2014) considered infrastructure developments as a major determinant of quality of life and well-being which are crucial to creating an enabling environment for economic growth and the improvement of quality of life.

Most definitions of infrastructure development often suggest strong public sector involvement. Generally, governments are involved in the provision and regulation of infrastructure development in order to reduce market failure, ensure equal distribution of developments and also facilitate their efficiency. Infrastructure development is considered in this study as the physical facilities provided by the government and other stakeholders for economic growth and improvement of quality of life. They are considered as the bedrock on which all other development and economic activities hinge. However, it also requires huge decisions process and planning. The success or failure of infrastructure development is affected by the structure and effectiveness of institutional framework. It requires extensive project organization which differs according to type of infrastructure projects.

Government agencies usually work together in the planning and designing of development while they also work together as operators and project managers. Infrastructure development is dynamic, capable of growth and requires continual planning process however it does involve huge budget allocation, performance standards and work schedules. Planning of infrastructure development is more strategic than commercial and are rarely based on easy or obvious solutions, especially for major infrastructure projects. Consideration must be given to the technology, the environment, the community, the culture and values etc. It usually requires long-term planning and carefully thought-out solutions, as any ill thought-out decision could lead to loss, failure, disappointment and may affect many stakeholders (Yeo, 1995; Enserink, 2000; Yazdani *et al.*, 2015).

Planning process for infrastructure developments must be for it to be sustainable in order to meet the increasing demand for infrastructure, rate of urbanization, sustainability and national economic development. However, it can be limited by uncertainty and ambiguity especially where there is lack of relevant information, scope and requirement, coupled with the inherent risk of unforeseen changes. A change in political and socioeconomic environment can affect the outcome of infrastructure development such as schedule, cost of projects and even the acceptance and sustainability of the infrastructure projects. In order to overcome the problems of uncertainty and ambiguity in planning for infrastructure development, there should be consultation with major stakeholders on the viability and relevance of the projects (Yeo, 1995). The outcome of infrastructure development depends on the success of the planning process, implementation and the ability of the planning agents to uphold the plans. The planning process and stakeholders for each infrastructure development differs according to types or classification. The different types of infrastructure development will be discussed in the next section.

2.2.2 Classification of Infrastructure Development

Generally, infrastructure developments are classified into economic and social; hard and soft; network and nucleus, as shown in table 2.1. This classification often overlaps, for example, road is classified as economic infrastructure and a network. Classification of infrastructure is important as it enables policy makers and analysts to prioritise and quantify infrastructures in order to formulate effective policies and allocate finances.

Classification is also useful in resolving the problem of evaluation of infrastructure development as it is further classified into physical terms and monetary terms.

Table 2. 1: General Classifications of Infrastructure

Hansen (1965)	Aschauer (1990)	Sturm and Jacobs, (1995)	Di Palma and Mazziotta (1998)	Biehl (1991)
Economic	**Core**	**Basic**	**Material**	**Network**
• Road • Highways • Airports • Naval transport • Sewer networks • Aqueducts networks for water distribution • Gas networks • Electricity Networks • Irrigation plant • Structures dedicated to commodities transfer	• Road • Highway • Airports • Public transport • Electricity networks • Gas networks • Networks for water distribution • Sewer networks	• Roads • Railways • Canals • Harbours and docks • Electromagnetic telegraph • Drainages • Dikes • Land reclamation	• Transport network • Water system • Energy network	• Road • Railroads • Water highways • Networks of communication • Systems for energy and • Water provisioning
Social	**Not-core**	**Complementary**	**Immaterial**	**Nucleus**
• Schools • Structures for public safety • Council flats • Waste disposal plants • Hospitals • Sport structures • Green areas	• Residual component	• Light railways • Tramways • Gas networks • Electricity network • Water supply • Local telephone networks	• Structures dedicated to development, innovation and education	• Schools • Hospital • Museum

Source: Adapted from Torrisi (2009, p. 17).

Monetary classification refers to infrastructure development as the flow variables while the physical term refers to quantity/size of infrastructure, e.g., kilometres of road, number of hospitals or electricity generating capacity (Neumann and Winter, 2001; Torrisi, 2009; Irmen and Kuehnel, 2011). Ennis (2003), simplified the classification of infrastructure development into seven categories and it was based on types of infrastructure services which are needed in urban areas, as shown in Table 2.2**.** His

classification is generic in nature and it is a useful framework for understanding the complexity of urban living and its dimensions (social, economic and cultural). Ennis classification emphasised the importance of infrastructure development and the services derived for the effective running of day to day activities, productivity and quality of life.

Table 2. 2: Classification of Infrastructure

Classification	Example
Physical	Highway, footpaths, water, sewerage, parking, public transport.
Economic	Places of business, skill training
Housing	Owner occupied, private rented
Education	Schools, university, colleges
Health	Hospital, health centres
Community	Recreational facilities, art galleries, museums, fire stations
Environment	Landscaping, open space, street furniture, ecological

Source: Ennis (2003)

Ahmed (2011) adapted Ennis (2003) classification and went further to categorise infrastructure as layers within the built environment in his study on liveable communities. He classified environmental infrastructure as the foundation of all other types of infrastructure, while community infrastructure was placed at the top as shown in figure 2.1. However, can there be a sustainable built environment without good roads, electricity, water etc.? Built environments require good roads and access to water because they are natural environments that are modified by human beings to suit the purpose that it is planned for. All the activities that take place in the built environment requires the availability of the physical environment. In categorising or classifying infrastructure, one must not lose sight of the complexity of interaction that forms the key characteristic of urban living even though it may be useful to classify one infrastructure above another for the purpose of analysis. But in reality their functionality is interwoven with little or no distinction. This was buttressed by Casey, (2005) that some infrastructures are readily visible to the eyes while others are not.

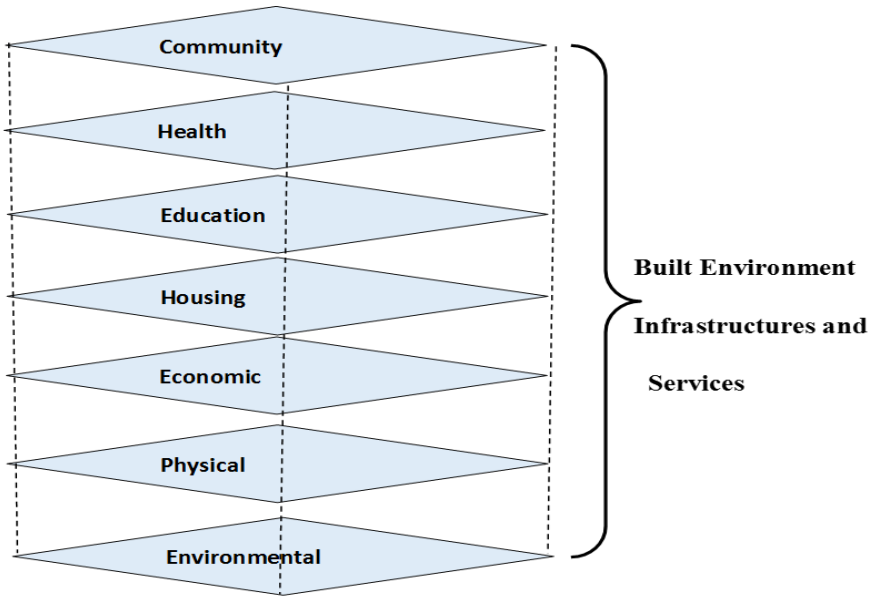

Figure 2. 1: The Urban Environment as Layers of Infrastructure
Source: Ahmed (2011, p. 55)

Ahmed (2011), argued in his study on landscape infrastructure and liveable city that environmental infrastructure such as landscaping and open spaces are the base for all the other infrastructure development. Important as his claim may be, however they can only be enhanced with the presence of physical infrastructure. Physical infrastructures are considered important to the functioning and operation of a city such as the movement of goods and services. It is also an important determinant of quality of life especially in respect to health and safety. They are made up of interrelated developments, which enhance the productivity and development of all other infrastructure. Therefore, there can only be a liveable community where there is adequate provision of physical infrastructure such as good road network, uninterrupted water and electricity supply, housing, etc. Development does not occur in layers, rather there exists an interrelationship between the provision of these physical developments and the services, although their connections are not easily visible as shown in Figure 2.2 below. However, the provision of one often leads to the development of others or enhances the productivity of others. It is quite difficult to provide most infrastructure developments in isolation. The development of one often leads to the development of others likewise the inadequacy of one infrastructure inevitably affects others. Therefore, any shortfall in the provision of one sector will have direct influence on the performances of other sectors.

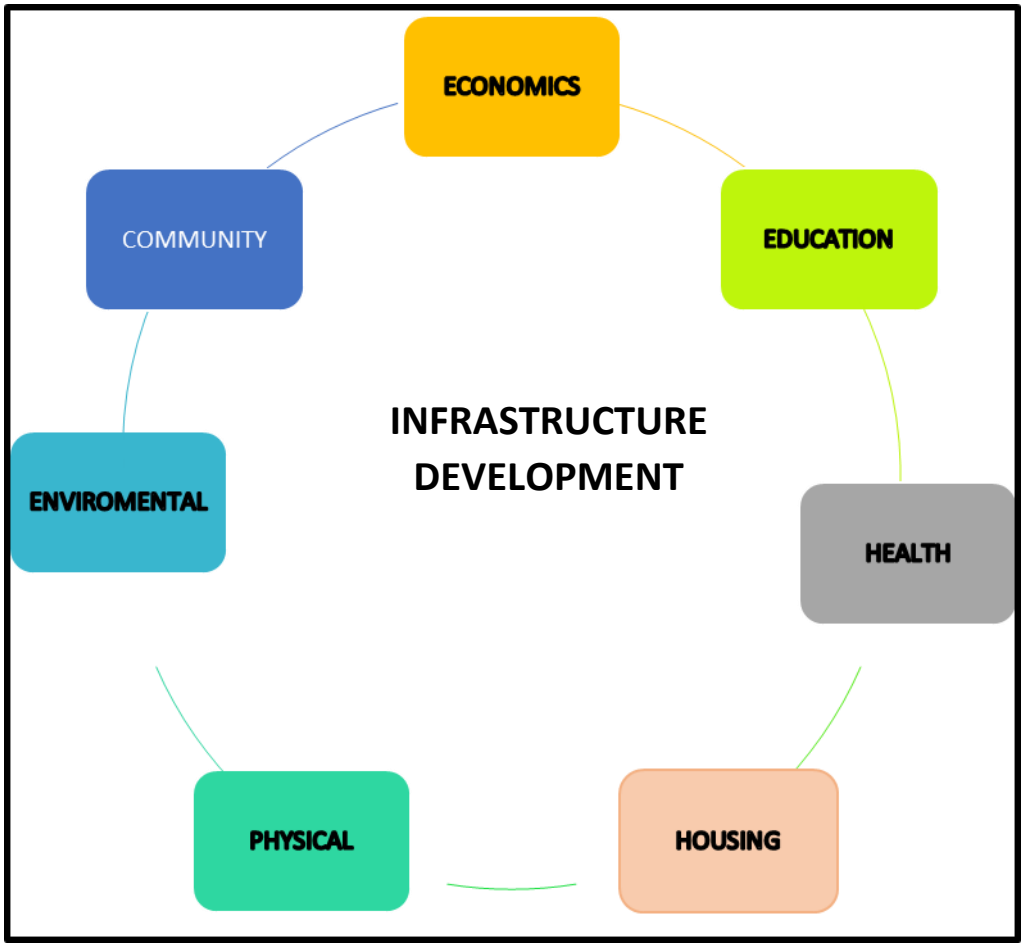

Figure 2. 2: Types of Infrastructure
Source: Ennis (2003, p. 9)

Ennis (2003), classification was adopted for this study with emphasis placed on the provision of the physical facilities and services. However, road, electricity, water and sewerage are considered as basic utilities by policy makers and the general public (Casey, 2005). Irrespective of the forms of definitions or classification offered, the common elements of any infrastructure development include the physical structures and the services derived from it. These two elements are often lumped together or sometimes confused to mean the same thing as they are both referred to as infrastructure development. However, they are different: services are the benefit or output generated from the physical structure that are put in place by either private or public sector (Lakshmanan, 1989; WorldBank, 1994; Prudhomme, 2004; Adedayo and Afolayan, 2012) .

2.3 Infrastructure and Economic Growth

Generally, infrastructure has two major functions: it provides services to residents and is also an intermediate input into production, supplementing capital and labour and thus affects the level of productivity of other factors of production thereby leading to economic growth. The economic growth of a nation largely depends on the adequacy and functionality of infrastructure development meeting their current or future needs. The link between infrastructure and economic growth is a continuous multiple and complex process as it directly affects consumption and production. It also creates many direct externalities and large flows of expenditure thereby creating additional employment. Infrastructure development directly influences economic growth and quality of life just as economic growth also contributes to adequacy of infrastructure development and quality of life; it is a virtuous circle. Therefore, adequate provision and maintenance of infrastructure facilities are absolutely necessary if meaningful economic growth is to be achieved and sustained.

Inadequate and underdeveloped infrastructure is often held responsible for the poor performance and growth of the different sectors of the economy as they are major factor in determining the location for every economic activity. Huge investment in infrastructure provision is responsible for the rapid development of the European countries, East and Southeast Asian countries and the People's Republic of China (Prudhomme, 2004; Sahoo and Dash, 2008; Srinivasu and Srinivasa Rao, 2013). Many scholars are of the opinion that there is a direct relationship between infrastructure, economic growth and urbanisation as they all affect the growth of a nation and standards of living (Prudhomme, 2004; Arimah, 2005; Sahoo and Dash, 2008; Srinivasu and Srinivasa Rao, 2013; Yazdani *et al.*, 2014; Yazdani *et al.*, 2015).

Other authors considered the relationship between infrastructure and economic growth as ambiguous and unclear. They are of the opinion that physical infrastructure are regarded as complementary investments needed for the generation of a positive economic growth (Estache and Alexander, 1999; Reinikka and Svensson, 1999). However, Reinikka and Svensson (1999) posit that poor infrastructure often leads to lower rate of return while Canning and Bennathan (2000) in their review of Kessides (1992) earlier work postulate that the influence of infrastructure on economic growth depends significantly on the quality of infrastructure and not necessarily on the availability, most especially at the construction stage of provision and ongoing

maintenance. Estache and Alexander (1999) are of the opinion that creating an environment in which infrastructure provision becomes more efficient through macroeconomic policy reform will provide suitable conditions leading to further sustainable economic growth and enhancement of human development. This is buttressed by Aschauer (1990) and Adele (2003) who both agreed that infrastructure investments are significant determinants of the overall quality of life especially with respect to economic and employment opportunities, health and safety, higher incomes levels and reduce mortality rate, etc.

The impact of infrastructure development on economic growth is also a fundamental issue in poverty alleviation strategies. It plays a vital role in stimulating economic growth which often leads to increase in employment, gross nation income and gross domestic income of a nation. It also contributes to reduction of poverty, deprivation and economic disparity. Amis and Kumar (2000), are of the opinion that economic growth also leads to upward demand for infrastructure provision except where there is corresponding supply. Yazdani *et al.* (2014) affirmed that increasing efficiency of infrastructure in terms of uninterrupted supply and efficient functioning allows greater safety for society as a whole. Adequate infrastructure development directly influences economic growth and also leads to rapid urbanisation and increase in population size of a location as it attracts residents, businesses and potential developers. However unchecked urbanisation also places untold pressures on available infrastructure facilities. It is a vicious circle and will be further explored below.

2.4 Infrastructure and Urbanisation

There is a strong relationship between infrastructure developments, economic growth and urbanization which are more visible in the urban centres and cities as they are centres of economic activities, modern technological advancement and opportunities (Manda and Odhiambo, 2003; Kleniewski and Thomas, 2006; Mitlin, 2008). Urbanisation often occurs as a result of net rural to urban migration leading to increase in population size and physical expansion bringing about a structural change in the form of settlement. Satterthwaite *et al.* (2010), defined urbanisation as a shift in settlement patterns from dispersed to denser settlement in search of good infrastructure and improved standard of living. Therefore, the term urbanization refers to contrasting spatial shifts in settlement patterns of urban and rural area leading to increasing growth of urban land use pattern and population size. Population size is

often used to delineate a place as an urban centre. Some countries consider any town with a population size of more than 2,500 as urban while some set a minimum of 20,000. However the definition based on population size was criticised as failing to convey important factors such as population density, the standard of infrastructure; different patterns of social groups and movements of people within cities and large towns (Godfrey and Julien, 2005).

Urbanisation also results from natural increase (difference between birth and mortality rates); net rural to urban migration and reclassification of a rural to urban area which can be due to expansion of an urban settlement boundary due to increase in populations sizes (Potts, 2009). In the past, rural-urban migration was the major cause of urbanisation explosion in most cities due to rural migrant seeking better income and living conditions, educational facilities, etc. Recently it is occurring more due to the push and the pull factor. The push factor are those factors that cause movement of people from one location to another as a result of war, civil disturbances, revolution, poverty, economic disaster (famine, loss of job etc.) and natural occurrences (earthquakes, drought and floods). While the pull factors are those factors attracting migrants such as employment opportunities, improved wages and infrastructure facilities such as good health services, education and housing. (Dhaliwal, 2000; Savage, 2006; Rana, 2011)

The rate and dynamic of urbanisation varies among nations due to its dynamic nature influenced by infrastructure provision. It is more visible in some countries than others due to certain factors such religious, economic, political and cultural factors. In Nigeria, it is due to economic factors while political unrest and civil wars in many Northern African countries are causing the migration of many of their citizens to other neighbouring countries in search of refuge and shelter. Whilst there is the benefit of ready labour market which includes both skilled and unskilled labour, it also creates problems such as pollution, overcrowding and social deprivation leading to increasing demand for infrastructure development. Consequently, this puts pressures on the existing facilities and is considered as the major cause of shortage of infrastructure. However, urbanization is not the root cause of inadequate infrastructure rather it is the inability and slow response of most governments to match the increasing demands with corresponding supply.

In most nations, the pace of population increase and urban change has outstripped the pace of needed social-political reform and the corresponding infrastructure development to cope with the additional demand brought by the sudden or gradual growth as evident in most cities in Asia, Africa, Latin America and the Caribbean. The ratio of the population living in very poor deprived conditions lacking basic amenities is higher in these countries. It is a reflection of their governments' ideology and approaches to infrastructure provision which is more than merely lack of resources. For example, in West Africa, Ghana is reckoned as a nation with increasing economic growth as a result of its economic reform and response to the demand for infrastructure leading to a change in its approach to infrastructure provision. In the mid-1980s, the state of infrastructure development and economic growth in Ghana was very poor like many other sub-Saharan African countries. This led to the migration of many Ghanaian to other countries such as Nigeria in search of better employment and improved standard of living.

The rate of migration was so high that in 1983, the Nigerian government created an expulsion order, forcing over two million immigrants (mainly Ghanaians) out of the country. In 1992 Ghana began an economy recovery programme which resulted in improved infrastructure provision and economic growth. Circumstances have however gone full circle with Nigerians migrating to Ghana in order to have access to better education system and improved infrastructure provision. Businesses and industries are also relocating even though Nigeria has more resources and revenue than Ghana. It all began with a change in social and political reforms as well as government approach to infrastructure development. (Easterly and Levine, 1997; Sachs and Warner, 1997; Collier and Gunning, 1999). Adequate infrastructure is required for economic returns, growth and development which in turn enhance environmental quality, productivity and also reduce the health problems face by low-income groups. The question therefore is what is adequate infrastructure? The next section discusses and provides answers to this question.

2.5 Adequacy of Infrastructure Developments

Adequate is defined by as 'satisfactory' or standard quality or quantity and it is a relative term which is quite difficult to assess as what is adequate to an individual may be considered inadequate by another depending on needs which is affected by social, cultural, economic and environmental factors (UN-Habitat, 2006). There is no fixed list

that describes what is adequate, good or perfect infrastructure development as it often comes in different forms. Most existing studies on infrastructure provision in Africa seek to investigate the provision and effects of inadequate infrastructure, as well as the role of the public and private sectors. However, most literature do not provide measures of determining adequacy of infrastructure (Ikporukpo, 1987; Roth and Banque internationale pour la reconstruction et le, 1987; Cheema, 1988; Anas and Lee, 1989; Rizzo, 2002).

There are few studies on adequacy of infrastructure. Samli (2011) and Parker *et al.*, (2008) are of the opinion that any infrastructure that does not meet the country's economic needs is deemed inadequate depending on its quality and quantity. Kayser *et al.* (2013), reviewed indicators for assessing domestic water service delivery and found that commonly used indicators are quantity, accessibility, service type, safety, reliability or continuity of service, equity, and affordability. He further revealed that there are intricate connections. The adequacy of infrastructure will be considered based on four factors, namely: availability; accessibility; affordability and quality. These factors are considered individually in respect to different infrastructure by many authors (Sharp, 1990; Azizi, 1995; Lee *et al.*, 1999; Azizi, 2000; Zérah, 2000; Carruthers *et al.*, 2005);

2.5.1 Availability Factor

Availability is defined as the physical presence of an infrastructure mode which are readily available for use at any time. Adequate infrastructure are expected to meet the basic needs of the service users and should be readily available in the residential area (Yazdani *et al.*, 2014). Availability factor is generally the same for each infrastructure and it is the total number of available infrastructure within a geographical setting. However, their adequacy is often measured by the services derived from them. It is usually determined by government budget or profit margin in the case of private sector investment. Availability and accessibility factors are similar and directly related as an infrastructure development and services might be readily available but not accessible to everybody. For example, road networks are the physical facilities while transportation is the services derived from the use of these road networks. Carruthers *et al.* (2005), considered road availability in term of available public transport options, timings and frequency. Therefore, the physical facilities must not only be available, it must also be accessible for users' connection and use when required.

2.5.2 Accessibility Factor

Gutiérrez *et al.* (2010), considered accessibility to infrastructure as a major determinant of economic development, mobility, social welfare and environmental impact. It is the ease of users' access to both the physical structure and the services. Physical infrastructure development itself is not enough; it is a means to an end which is the services derived from them. It is not enough for the physical infrastructure to be provided, the fundamental issue is the ease of users' accessibility and the quality of supply. Good infrastructure development should be designed to accommodate service user's needs including the low-income and vulnerable residents. A good road with a bus stop requiring users to cross major artery road without the provision of a pedestrian overpass maybe of little use or limit the access of children, elderly or disabled users if it does not have a disable ramp. Some authors and policy regulators in UK prefer to use just the connection or disconnection rates to determine user's accessibility to electricity, water and Internet facility. However Marvin (1994) opposed the use of disconnection rates or alternative methods of payment as indicators of level of access to infrastructure provision. He considered these indicators as crude measures of accessibility because other factors are neglected such as self-disconnection from prepayment meters, socio-economic implications and environmental obligations.

Doi *et al.* (2008), also criticised these measures as highly simplified representation of development opportunities without appropriate consideration of people's values and behaviours. Marvin (1994), identified other accessibility indicators based on users' connection, use of service and the impacts on users due to inability to access basic infrastructures. He used these indicators to assess the quality of service and users' accessibility to energy, gas water, electricity and telephone connection in UK at household level. His study however revealed that where infrastructure development and services are widely available, users are presented with equal opportunity of accessibility, irrespective of their socio-economic status and levels of accessibly (connectivity) vary at household level based on the level of income of user. It also shows that lack of accessibility to some particular infrastructure (energy, gas and water) could result in discomfort or adverse effect.

However, it is easier to assess users' accessibility where there are adequate records, but in most developing countries, significant data are lost due to poor record keeping, thereby making it difficult to assess the true level of user's accessibility. Accessibility

is enhanced where there are multiple providers of infrastructure services like UK; users may have the opportunity to select or change service providers' bases on quality and rates of utility services. But in the case of Nigeria, there is prevalent government monopoly of the supply of basic infrastructure with no alternative service providers. Although due to deficiencies, users do find alternative source of supply, which often comes at an additional cost. Users spend money to purchase and fuel a generating set for electricity supply, hand-dug wells or boreholes for water supply. In fact, many households rely on water vendors for their domestic water supply or open up access route to their property.

Furthermore, regulators enforced the compliance of private utility companies in order to ensure that accessibility of basic utilities do meet wider economic, social and environmental obligations. In United Kingdom, they ensure that the needs of the low-income level users are met through the benefits system while in US service provider are expected to monitor users access through socio-economic status; special energy conservation and efficiency programmes for low-income level users. Both countries have structures in place monitoring service users' levels of accessibility which are not available in most developing countries with their preponderance of public provision. Therefore, poor accessibility and inadequate supply are often concealed from public records, which include poor record of frequency and duration of disconnection; intermittent or poor supply; and charges. In Nigeria pre-payment meters was introduced in electricity provision and it provides service users the opportunity to pay actual rates consumed as against flat rates. This presents users with the simple solution to non-accessibility, poor supply, disconnection and ease of affordability. There is the question of users' affordability of services which directly facilitates accessibility, but then can every resident afford the charges for use? Marvin (1994) argued that it is difficult to assume equal level of accessibility and affordability of all service users depending on their socioeconomic status.

2.5.3 Affordability Factor

Affordability is defined by Collins online dictionary (2014) as "Inexpensive; reasonably priced", it also means to be within one's financial means. Therefore, an adequate infrastructure should be at a price that is easily affordable by all end users. Affordability herein is considered from the users' perspective and it is the ability of households or an individual to pay the charges for basic infrastructure services. Most public sector

infrastructure provisions are heavily subsidised in order to increase accessibility and affordability, while the focus of private utilities providers is maximum profitability. Sometimes low-income users have to make sacrifices in order to meet the financial cost of using an infrastructure service. As observed by Carruthers *et al.* (2005, p. 1) in the case of public transport that *"affordability" refers to the extent to which the financial cost of journeys put an individual or household in the position of having to make sacrifices to travel or the extent to which they can afford to travel when they want to…"* in which case many families have to forego other activities such as family vacation, visiting other relatives for important trips to work.

The affordability of some infrastructure such as water, electricity depends on household income; the market prices; efficiency and costs of appliances needed for connection or use. In some cases, there may not be any price associated with certain non-commercial provisions different from public supply such as fetching of water from springs or streams. However, there is an opportunity cost based on the time spent and distance covered in fetching the water. In addition, the capital cost of the appliances required for use or connections to infrastructure services also determines affordability e.g. electric cable, poles, and water pipes. Additionally, in some developing countries, electricity supply is poor or not available even though physical infrastructures might be available and accessible. Users often spent parts of their income to provide alternative sources of supply such as purchase and fuelling a generating set, rechargeable lamp, lanterns or have multiple electrical connection to the main transformer in case of 'light shedding' in order to have an alternative source of supply. It is therefore difficult to ensure equal level of affordability (Dutt and Ravindranath, 1993; Marvin, 1994). Service users are forced to spend a large share of their family income on infrastructure referred to as *"uncompensated costs for third parties"* by (Hebbert, 1986, p. 143). He pointed out that most homeowners suffer financially from un-serviced land use distributions produced by free speculative market.

Service charges for infrastructure facilities should not strain user's budget, rather it should take into account the users' level of income. Otherwise, public rejection, self-disconnection or inability to pay for usage may inevitably limit the success of the project and could also result in health and environmental hazards. From the foregoing discussion, it is evident that the availability, accessibility and affordability of infrastructure does not automatically mean that they are reliable or of good quality,

however quality factor is of great importance in determining the adequacy of infrastructure development.

2.5.4 Quality Factor

Quality is a degree or grade of excellence. However, it is difficult to measure. It is difficult to measure the level of quality and quantity of infrastructure especially where there is inadequate data collection and record keeping. It may be easier to measure quantity by total number of physical infrastructure provided against government development plans where there is such a plan and adequate records. Some authors also use physical listing such as telecommunication network, water and sewers or transportation system while others prefer a broader view of using the intrinsic value of infrastructure as a capital investment (Aschauer, 1990; Sears *et al.*, 1990; Fox, 1994; Fox and Porca, 2001; Pow, 2009; Kayser *et al.*, 2013; Yazdani *et al.*, 2014).

However, the idea of using the value of infrastructure was criticised and considered as inadequate because such value will only be based on the physical structure, excluding the services provided by the physical installations or constructions. Some authors will rather measure the quality of infrastructure by the demand for services derived from the physical installation (Fox, 1994; Arsen, 1997; Halstead and Deller, 1997). The use of total numbers of physical installation to measure the availability of infrastructure development might be easier, however bricks and mortars does not automatically transcend to good quality or adequacy. Likewise, the hidden value of infrastructure lies in the services provided by the physical infrastructures. I therefore adopted the notion of measuring the quality of water infrastructure[1] by the services derived such as the amount of water supplied to household per day against the standard minimum requirement while road infrastructure is assessed by the types of road covering. The quality of the water is also determined in terms of its colour, odour, taste and turbidity.

How do we assess service efficiency to households? Some prior studies examined the impact of poor quality and unreliability of infrastructure service on households and concluded that only countries or regions with constant supply of infrastructure services have been most successful in attracting foreign investors (Cohen and Uphoff, 1980;

[1] The quality of water infrastructure herein refers to the means of supplying water to residents and the quantity supplied which compared with the standard minimum requirement. The quality of water will not be tested in this study.

Arimah, 2005; Yazdani *et al.*, 2014). Marvin (1994), assess accessibility to utilities in UK, his argument is that some service users might be disconnected even if they have access to the infrastructure within their home. The model was modified to suit the environment and the nature of the study as shown in table 2.3 below. Adequacy in this case was measure from the users' perspective in order to have access to adequate information.

Table 2. 3: Adequacy Measure for Infrastructure development

MEASURES	INDICATORS	MEASURES
AVAILABILITY AND ACCESIBILITY	**Connection to service**	Percentage of households connected or disconnected
	Alternative source of supply	Water vendor, boreholes, hand-dug wells etc.
AFFORDABILITY	**Service charge**	Rates per utility per household
	Minimum wage (national/state)	For both Federal and State level
	Method of payment	Fixed rate, Prepayment, credit, standing order charges, repayment of arrears.
	Non-use of service	Low-income, Fear of debt, concern about costs,
QUALITY	**Efficiency and reliability**	Unavailability, interruption and constant supply
	Use by amount (water)	Average number of litres of (public) water supply consumed per day by household/communities.
	Types of covering (road)	Surface condition, reliability of use, number of lane, road width
IMPACTS	**Social**	Isolation, age, family size, theft, low level of consumption and service, anxiety and worry.
	Economic	Debt, disconnection (self or provider), low tariff structures or project cost.

Source: Adapted and Modified from Marvin (1994, pp. 433-445)

Marvin's (1994) framework was adapted as it was the closet evidence found in literature for assessment of utilities similar to those been assessed in this study. Although his study was conducted in UK where houses are readily provided with all the basic infrastructure and users' only need to connect appliances to terminals for access, it has relevance for this study. In Nigeria, users are responsible for the provision of housing and basic infrastructures. Marvin's study was modified to assess adequacy of only road and water infrastructure. His study revealed that the quality of the infrastructure services is very important as it has great impact on users' quality of life, home-based services or businesses. It is hope that this new framework would

provide useful information for further research and also use by policy-makers to assess different forms and levels of 'accesses to adequate infrastructure. The framework will be use to assess the impact of community participation on infrastructure within a locality (communities. It also includes use of service; disconnections; methods of payment; use of pre-payment meters; implications of poor or non-connectivity (alternative supply) and low levels of service. These indicators along with the four factors above will be used to assess adequacy.

2.5.5 How Much is Adequate?

A good infrastructure should be reliable and in continuous supply (Kayser *et al.*, 2013). For example, the adequacy of water infrastructure is the direct access to safe drinking water source within a household through piped means. Gleick (1998), consider "*the right to water as an implicit part of the right to food, health, human well-being and life".* Access to water source outside the household is considered less adequate even if it is within the household yard. A joint Monitoring Programme by WHO and UNICEF global assessment of water supply and sanitation data recommended at least 20 litres of water per person per day as reasonable and source should be within one kilometre of the users dwelling (Supply *et al.*, 2000; Newton, 2011; Nwankwoala, 2014). Similar figure was suggested by other researchers emphasising the importance of reducing distance and encouraging household connection (Great Britain. Dept. for International and Well, 1998; Carter *et al.*, 1999; Kayser *et al.*, 2013). The SPHERE project sets out 15 litres of water per person per day as minimum standards for disaster relief while 50 litres per person per day was considered adequate basic water requirement (Gleick, 1996). The 50 litres per person per day is basically for human domestic needs which are drinking (5 l/p/d); Sanitation services (20 l/p/d); Bathing (15 l/p/d); Food preparation (10 l/p/d). It is considered to be the minimum required for average domestic activities and just enough to sustain life in moderate climatic conditions (Gleick, 1998). Howard and Bartram (2003), provided a service level requirement of water provision required to promote good health as shown in Table 2.4 below.

Table 2. 4: Service Level Descriptors of Water in Relation to Hygiene

Service Level Litre per person per day (l/p/d)	Access Measure	Likely Quantities Collected	Level of Health Concern
No access (quantity collected often below 5 l/p/d)	More than 1000m or 30 minutes' total collection time	• Very low • Consumption cannot be assured • Hygiene is not possible (unless practised at source)	Very high
Basic access (average quantity unlikely to exceed 20 l/p/d)	Between 100 and 1000m or 5 to 30 minutes' total collection time	• Low • Consumption should be assured • Basic food hygiene and hand washing is possible but laundry and bathing may be difficult to unless carried out at source	High
Intermediate access (average quantity about 50 l/p/d)	Water delivered through one tap on plot (or within 100m or 5 minutes' total collection time. Requires energy and time	• Medium • Consumption is assured • All basic personal and food hygiene assured including laundry and bathing	Low
Optimal access (average quantity 100 l/p/d and above)	Water supplied through multiple taps continuously	• Varies significantly • Consumption – all needs met • Hygiene – all needs should be met	Very low

Source: Adapted from Howard and Bartram (2003, p. 22).

Water supply below 5 l/p/d is considered as no access while supply of up to 100 l/p/d is considered optimal. The volume suggested by Howard and Bartram (2003) does not account for other uses outside normal domestic use such as water use in health care facilities, food production, economic activity or amenity use. There seems to be conflict on the how much water is adequate or the minimum requirement for domestic uses as some other water usage could occur outside household level such laundry or bathing. The issue of how much water a person required is relative to their individual or household needs as some factors such as health requirement, number of household, habits etc. may influence the requirement. Even when the basic need for water is limited to personal hygiene only, defining a minimum requirement may have limited significance as the volume of water used by an individual or households depends on accessibility based on distance, time to water source, reliability and potentially cost. For example, the volume of water used by households purchasing water from a vendor will be different from those having water source within the house.

Accessibility interacts with reliability and can be measured with reference to water collection time or wasted journey when hardware is faulty or there is no water while it is travel time, ease of movement for road infrastructure. Water quantity is affected by distance and characteristics of the collector. Women and children in low-income countries are the foremost water carriers and study shows that they spend large amount of time and several trip walking to a water source and carrying water back to the household and it can cause musculoskeletal disorders and related disabilities (Geere *et al.*, 2010; Sorenson *et al.*, 2011; Jasper *et al.*, 2012). On the other hand, recent study shows that water quality decreases with transportation, handling and storage during collection due to contamination, the studies revealed that diarrheal disease reduces as water collection time and distances decreases (Clasen and Bastable, 2003; Wright *et al.*, 2004; Trevett *et al.*, 2005; Levy *et al.*, 2008; Pickering and Davis, 2012).

The characteristics of road infrastructure is different from water infrastructure. Roads are needed for the interconnection of all growth-generating sectors in a region or geographical setting. They enable the efficient and wider distribution of the economic growth benefits. In particular, road networks are prerequisite to the development of remote and environmentally difficult areas: it links the rural population to the economic opportunity. The adequacy of road network is determined based on road density which is measured as the length of roads in kilometres per thousand square kilometres of geographic area. In a well-planned city, road and streets are expected to cover certain percentage of entire land area although the percentage varies in different countries. In Nigeria it is an average of 25% to 35% while in USA (Los Angeles and Washington D.C), it is 41% to 45% (Obateru, 2003).

To overcome the problem of heterogeneity of human needs in this research, the adequacy of water will be determined based on volumes of water and the number of hours of supply. In addition,adequacy of road network according to (Chen, 2002) can be determined by the connectivity, travel time and capacity of network. Adedeji *et al.* (2014) and Aderamo and Magaji (2010) used road width, surface condition, number of lane and reliability of usage to assessed qualities of road in their study. The same variables was adapted will be use to assess the quality of community roads in the case study while road surface condition will be rated from excellent to very poor based on condition assessment shownin Table 2.5.

Table 2. 5: Road Surface Conditions Assessment

Condition Assessment	Characteristics
Excellent	Free of potholes, peel offs, and cracks.
Good	Very few pot holes and peel offs
Fair	Some potholes and peel-offs that could be refilled to make traffic flow better.
Poor	Potholes and peel offs at almost every kilometre; the shoulder of the road had eroded off. Many potholes with gullies or ditches, broken down bridges, broken road shoulder and depression.

Source: Adapted from Central Bank of Nigeria Report (2003) in Opawole et.al (2014)

The success of any infrastructure project is dependent on users' requirements and their ability or willingness to pay ~~to~~ for it. It is therefore important to ascertain users' (citizen/community) needs right from the planning phase or the benefit of the project to users, which may make users use the facility or pay for its services? Furthermore, the adequacy of a project is not determined by availability, accessibility, affordability and quality factor only. The process and approaches adopted by providers have great impact on the adequacy of infrastructure provision. There are different approaches to the provision of infrastructure, which will be discussed in the next section.

2.6 Approaches to Infrastructure Provision

Generally, the process of infrastructure development involves planning, designing, implementation, management and maintenance; however, the planning stage is very important and it is the foundation of any successful program~~me~~. It is also important for fair distribution of development within a city as Yeo, (1995) and Yazdani *et al.*, (2014) studies~~y~~ revealed that lack of effective planning of major infrastructure project often leads to problems of ambiguity and uncertainty. This is attributed to initial lack of clear definition, lack of information and relevant knowledge of the project objectives, scope and requirements. Therefore, without an effective development plan, the process and implementation of infrastructure development would be haphazard, cumbersome and inefficient. Likewise, infrastructure development involves many approaches and various stakeholders. The approach adopted is greatly influenced by the political ideology of the government of a country. The system of governance and government policies usually affect every decision on infrastructure development. Most government

policies are centred on their political agendas and sometimes may be difficult to achieve or limited by other factors such as finance. However, they have direct bearing on social, economic, and spatial development. They are major determinant of any approach adopted towards infrastructure development. Prominent in literatures are three major approaches to infrastructure provision which are further discussed below.

2.6.1 The Central System Approach

The central system approach is regarded as the traditional top-down approach where infrastructure is solely financed by the government and all finance and decisions emanate from government, which is usually centralized, hierarchical and sometimes technocratic, (Murphy, 2007). Most central governments traditionally have sole responsibility of meeting the infrastructure needs of their citizens (Brett, 1996; Azizi, 2000). This approach is based on federalism; it is a nationalized way of providing infrastructure which is guided by development plan. It is a popular approach adopted by many nations for many years. The central system became popular in the post Second World War era. For example, Britain was using the municipal system of infrastructure dated back as far as the 19th century until the end of the Second World War when the central system approach was adopted, which led to the reduction of the control of lower level of government. It was regarded as a period of nationalized utility supply, where infrastructure was provided at standardized level and tariffs. Infrastructure was publicly controlled and provided in excess capacity ahead of demand in order to aid development and to support both national and regional economic development objectives (Kirwan, 1990; Guy and Marvin, 1996; Healey, 1996; Ibem, 2009; Yazdani *et al.*, 2015).

The implementation of central system of approach ranges from single organization to multi-organizations approach where several government agencies are involved in sectoral provision of infrastructure. Many developing countries like Nigeria are using this approach; however, the need to adopt a more proactive approach is forcing many central governments to seek alternative approaches as a result of financial burden and economic recession. Several factors limit the effectiveness of this approach such as reduction of national income and changing economic conditions, upsurge in the cost of construction, expenditure and tax restriction, public bureaucracy and lastly the growth in the size of government workforce. These factors affect national aid and governmental expenditure on infrastructure thereby causing a reduction of

infrastructure provision especially in developing countries (Azizi, 1995; Azizi, 2000; Adedayo and Afolayan, 2012).

For example, Indonesia government's expenditure on public infrastructure was reduced as a result of decline in oil revenue. Even though Indonesia was experiencing rapid growth, provision of adequate infrastructure became a major struggle for the Indonesian National Urban Development Strategy which led to the introduction of the Integrated Urban Infrastructure Development Programme (IUIDP) in 1985 (Steinberg, 2007). However, this new initiative was merely a facilitating programme and not aimed at providing all the funding and resources needed by the Indonesia central government (Azizi, 2000; Steinberg, 2007). The central system approach was widely criticized for not allocating any control to subnational governments or local authorities, which is the lowest level of government closest and accessible to local citizens. Rather infrastructure was largely controlled by centralized publicly owned corporations. However, the central system approach is capital-intensive approach which resulted in many government adopting decentralized system, which is a more liberal approach to infrastructure development.

2.6.2 Decentralized System Approach

The decentralized system is the involvement of subnational levels of governments and other stakeholders in infrastructure development. It also involves the privatization of public infrastructure developments in order to increase efficiency and also to reduce debt. It is the relaxation or removal of the rules of entry and exit into a market in order to influence private sector investment and also to increase competition among economic actors. The decentralized system usually reduces or removes the financial obligations of infrastructure provision from the central government. The decentralized system is criticized as leading to unequal distribution of resources; unequal development and difficulties in implementing macroeconomic policies (Davezies and Prud'Homme, 1994; Prudhomme, 2001; Prudhomme, 2004; Rivas, 2014).

Budget allocation is expected to reduce if not eradicate unequal distribution of resources and development. Decentralization is expected to bring development closer to the local people and also induce growth by creating competition among local governments or regional authorities. Is the decentralized system more effective at increasing accessibility of local people to infrastructure development than a centralized

approach? The answer is probably no. Decentralization is supposed to be an improvement over the failures of centralized approach but it also has its shortcomings. Nevertheless, despite its criticisms of leading to unequal distribution of resources and development, it is still a popular approach adopted by many nations who have moved beyond the central system of infrastructure development including some developing countries (Lakshmanan, 1989; Bardhan and Mookherjee, 2006; Sepulveda and Martinez-Vazquez, 2010; Rivas, 2014).

In theory, the benefits of the decentralized system over central approach are supposedly clear, such as reduction of the financial burden of infrastructure provision on central government, increasing the power of the subnational government units, improving accessibility of the local people to public infrastructure and lastly representative governance. However, in reality these results are less visible and have been questioned by the critics of this approach. Empirical studies revealed that the results of decentralization hinges on the characteristics of the local level of government whose formation or characteristic is usually not different from that of the central government. Therefore, the decentralization process is not totally free of elements of central system of governance. It also depends on the willingness of central government to mediate inequalities at the lower level of governmental units. It is generally believed that some subnational level governmental authorities might have more influence with central government which may result in undue advantages and bigger portions of federal resource allocations. Also some subnational levels of government which probably have higher technical or fiscal ability may be better able to attract economic activities than others (Prudhomme, 2004; Bardhan and Mookherjee, 2006; Treisman, 2007; Rivas, 2014)

Another advantage of decentralisation is the free entry of private sector into the infrastructural sector and other sectors where there has been public monopoly. The rationale for decentralisation for many countries is different, it could be for religious, ethnic, economic, outcome civil wars and pressure from ethnic groups, political like in the Latin American because of the need to stop autocratic central government and in Africa because of multi-party political system. For many countries, decentralisation is as a result of the inability of government meeting the infrastructural needs.

2.6.3 Private Sector Provision

Due to the failings of central and decentralized approaches to meeting adequate provision of infrastructure provision and the need for government to reduce government expenditure, private sector involvement became a popular approach. Public Private Partnerships (PPPs) have emerged in recent years as a major source of private sector investment in infrastructure projects. PPP is used for various purposes; for example, as a tool of governance, or a way of providing public services without the public sector incurring the cost. It became a tool for public policy and sharing of finance, risk and profits between the public and the private sectors (Osborne, 2002; Patil *et al.*, 2015). PPP can be of benefits to the public sector if properly managed such as lessening the financial burden; transferring risks from the public to the private sector; and providing more efficient, lower cost, and reliable services. It involves the sharing of expert knowledge and technical supports between the public and private sector. PPPs also enables the transferring of operational and construction risks from government to private partners, while government retains regulatory risk in order to underwrite minimum revenue from user charges (Kwak *et al.*, 2009; Patil *et al.*, 2015).

There are different types of PPPs which includes Operation-Maintenance, Design-Build-Operate, Design-Build-Finance-Operate, Build-Own-Operate, Build-Operate-Transfer, and Private Finance Initiative. Many European countries such as Spain and United Kingdom (UK) are using PPP to enhance the provision of infrastructure in their countries. For example, Private Finance Initiatives was used by the UK government to finance most of their infrastructure development without placing the burden on government budgets (Helm and Tindall, 2009). The private sector provides the finance while government acts as the regulators. PPP ensures a long term venture franchise where private sector partner takes on the responsibility of providing public service, thereby utilising their management skills to enhance the adequacy and the management of the infrastructure. The report of Arthur Andersen and Enterprise LSE published in 2000 revealed that PFI projects was saving about 17% cost of procurement over the traditional form of procurement (Andersen, 2000).

However, PPP has been criticised as another name for privatisation and a time consuming exercise. Equally poorly managed outsourcing approach often result in wasted resources, higher costs, decreased performance and considerable public concern. Moreover benefits and savings are not automatic, it require huge

management and responsibility which include setting up of independent regulatory bodies within the public sector to monitor and ensure that high safety standards are maintained (Debande, 2002; Bing *et al.*, 2005). The setting up of these regulatory bodies constitutes addition cost incurred by government. Therefore the use of private finance initiatives is been discouraged presently by the UK government as it is considered a time consuming process and an expensive ventures (Osborne, 2002; Helm and Tindall, 2009). Nevertheless, private sector investment though may be expensive, is perceived as a good source of finance generation. End users are usually left with no choice than to pay for services used, which sometime could be prepaid or "pay as you go" as it is popularly called in Nigeria. The prepaid format is usually adopted in order to limit liabilities and defaulters.

None of the approaches discussed above is without complications and may not be operational in all situations or countries. There may be need to adapt and modify each method to suit the political, cultural and economic needs of the country. There is also a need to involve the users or recipients of the infrastructure projects. Chen (2002) and Adedayo and Afolayan (2012) emphasised the importance of service user (local community) involvement as they are also major stakeholders. They are a major determinant of the success of any infrastructure development, continuous liquidity and efficiency of future cash flows for any infrastructure projects. A variety of other private sector involvement is currently being used by many countries to finance urban infrastructure. Egypt and Iran governments are using the user-pays system while in United States and Canada, impact fees are being used to shift the cost of infrastructure provision on developers and residents. In most US cities, estate developers are made to pay the cost of infrastructure through land use levies (Nelson and Wright, 1995; Azizi, 2000; Brueckner and Pai, 2009).

Community participation is a form of private sector provision, it is the involvement of local people or service users in the decisions and the provision of infrastructure. It ensures their involvement in the planning, implementation and management of infrastructure developments. This represents a change of approach from the public and private sector involvement in infrastructure provision and it is a trend that is gradually gaining ground as an approach to infrastructure development. There are different terms that are being used interchangeably with community participation such as citizen participation. The involvement of local community is in recent times strongly

encouraged by many international aid donors such as World Bank, USAID, and UNICEF.

Community participation is being encouraged due to government's failure of meeting infrastructure demands, there are many pockets of self-help programme of different types including infrastructure provision where local communities adopt community participation as an alternative or panacea to their immediate needs. Community participation is expected to improve the provision of adequate infrastructure and the effective means of meeting the cost of infrastructure provision. This is the crux of this research. This approach will be explored in detail in chapter three of this study. The next section provides an analysis of the effectiveness of government approach to infrastructure development.

2.7 Factors Affecting the Outcomes of Government Approaches

Several factors have been identified to have influence on the outcomes of government's approaches to infrastructure development. They include institutional framework, finance, corruption, bureaucratic process, and attitude of government officials and the electorates. While these factors may have been addressed to a great extent in the developed countries, they are limiting the success of approaches adopted by central governments in the developing countries.

2.7.1 Effective Institutional Framework

The planning process for infrastructure development must begin with a clearly stated goal and often includes important decisions involving different levels of government and stakeholders. This requires institutional framework which is the designation of responsibility to organisations towards the formulation, planning and implementation of policies. Institutional framework usually involves inputs from various agencies ranging from single to multiple agencies, ministries, local governments and could sometimes involve co-ordinating body (Dalai-Clayton *et al.*, 2003; Hamzah, 2010). It is essential for policy makers to identify and implement appropriate approaches and institutional framework that could provide adequate infrastructure.

Various approaches have been adopted by many governments to ensure adequate provision of infrastructure, they include single organisation, multi-organisation, regional development and privatisation. Single organisation approach is the least popular and

mostly use for the roles of regulators and such organisations must have the authority to monitor and regulate the activities of other agencies. This approach is often used to ensure government development policies and objectives are being met. Multi-organisation approach on the other hand provides decentralisation of responsibilities and power as different organisations have different roles and focus on different sectors of infrastructure development. This approach requires effective monitoring in order to ensure unity of purpose and to avoid duplication of roles and functions. However due to competing priorities of other agencies and leadership political agendas, the success of multi-organisation approach is often undermined. The effectiveness of multi-organisation approach therefore requires institutional framework, which drives achievable and realistic policy, the willingness of government officials to discharge their duties and availability of finance.

2.7.2 Finance

Finance is another major determinant of the outcomes of government strategies and policies, it is the bane of any successful governments' structure and it is a principal factor for productivity which is vital for development. It is often the principal constraint to developers, whether public or private; individual or corporate. Several authors also affirm that finance is the most critical issue affecting infrastructure development (Mor and Sehrawat, 2006; Brueckner and Pai, 2009; Ikpefan and Akande, 2010; Adedayo and Afolayan, 2012; Yazdani *et al.*, 2014). Infrastructure projects differ in many ways from other projects undertaken by companies because of huge capital outlay, higher risk and longer maturity (5-40 years), fixed and low (but positive) real returns. It involves a wide range of activities and policies which depends largely on availability of finance as well as overall national priorities.

There is no perfect approach that can fix all the problem of inadequate finance, even though, most governments are making considerable efforts, they are faced with the difficulties of generating and reallocating domestic revenue from other sectors as it sometimes requires structural reforms. It is important to increase the efficiency of existing infrastructure and adoption of alternative sources of finance in order to generate more funds for upgrading and provision of new services. Many governments rely on budgeting and internally generated revenue such as council tax as the major source of revenue for provision of public infrastructure. In United Kingdom, council tax

is paid to respective local governments or boroughs by residents while businesses pay business rates.

In Nigeria, the equivalent of council tax is the tenement rate which many of the residents do not pay as they regard infrastructure as free goods and they are not prosecuted while in UK defaulters are usually prosecuted, with implications to defaulter's credit rating. Tenement rate as a source of revenue in Nigeria will be further discussed in the next chapter. Due to the failure of many governments to generate adequate finances, most especially in developing countries, there is increasing reliance on international aids from external donors such as the World Bank to generate funds for infrastructure development. However due to continuous rising demand for infrastructure and the current economic recession, many aid donors are reducing financial support. Therefore, the need for private sector involvement became a paramount issue.

Increasing private sector investment may seem possibly the most concrete and realistic method of generating more funding for infrastructure development. Many public sector authorities are privatizing infrastructure developments or are into partnership with private sector investors (local or foreign). In UK and US, most infrastructure services are privatized in order to provide uniform high quality services (Ennis, 2003; Prudhomme, 2004; Ikpefan and Akande, 2010). It is a method used by many advanced countries is sourcing for finance through capital markets and public involvement. It enables private investors to determine the economic value of the project right from the planning stage. It is called "using the invisible hands" since it allows the capital markets to regulate and determine the economic value of infrastructure project in order to reduce the lack of diversification problems faced by both creditors and project owners (Chen, 2002). Privatization also increases public trust and enhances private sector investment. Chen (2002) in his study on *"A new perspective on infrastructure financing in Asia"*, buttressed the need for private sector investment as a way of attracting funds from both domestic and foreign investors which helps to generate funds, interest and awareness of the project on a global scale. It also encourages private sector investments in the domestic capital market, which helps establish reasonable source of financing and reduces problems of cost overrun and inefficiency.

2.7.3 Poor Governance and Corruption

Several authors examined the relationship between governance and infrastructure at the national and regional levels, by analyzing the costs of corruption on infrastructure development and provision (Knack and Keefer, 1995; Kaufman and Alfonso, 1997; Rodrik, 2003; Kenny, 2007). They concluded that even though good governance influences infrastructure development, unchecked corruption is an indication of poor governance and inefficient government policies. Poor governance often leads to inadequate provision or wrong (not needed) infrastructure; neglect of public interest; poor management and lastly high levels of thefts and losses (Kenny, 2007; Adedayo and Afolayan, 2012) Corruption also increases the price of infrastructure; reduces the quality of infrastructure development and economic returns on infrastructure investment.

2.7.4 Bureaucratic Process and Attitude of Government Workers

The bureaucratic process and attitude of government workers also have significant effects on the efficiency of approaches to infrastructure development especially in the developing countries. A World Bank (1990b) reports on Peru's water supply and sanitation sector revealed that attitude of government officials undermined the efficiency of decentralization approach to water provision. The report revealed that regional and local government's officials in Peru were assigned the operational responsibilities in the new regionalization process and changes to water distribution and sanitation sector in order to bring the level of responsibility closer to service users. They were challenged to manage services and respond efficiently to the local needs of 400 urban centers of not less than 100,000 inhabitants each. However, those towns did not benefit from economies of scale and therefore could not provide good working conditions and salaries for the government officials saddled with these responsibilities.

The conditions of those urban centers were speculated to worsen within the next two or three years of decentralizing water infrastructure as any new institutions need time and assistance to develop required capacity. This is a common problem in most developing countries where governments are always quick in adopting policies that seems to have worked in developed nations without having the necessary institutional framework or considering other factors (political, cultural, economic, etc.) inherent to their nations. Many government workers prized their personal gains above institutional interests and this is worsened where they do not have the required knowledge or

expertise to discharge their duties. Many of them do not go back for further training such as compulsory professional development or conferences. This trainings or workshops will not only enhance their knowledge but bring them abreast with new ideas in their field of training.

It is difficult to declare a single approach as the best method of ensuring provision of adequate infrastructure. Therefore, many nations, including developing countries, are using mixed method approaches. While some infrastructures are centrally provided others are allocated to the lower levels of government. A good example is electricity which is mostly centrally provided in many developing countries but in developed countries like United Kingdom, these are provided by private sector but are regulated by government. Water provision is however provided based on regional sectorial approach while waste disposal services are provided by the local government. Before the Second World War, ownership and decision on infrastructure investment in United Kingdom was the responsibilities of the Local Authorities However State control and nationalisation of infrastructure sector increased in the post-Second World War period and infrastructure such as road and health were centrally controlled.

UK adopted this approach just as many other developed countries because of the need to increase adequacy of infrastructure investment in order to strengthen economic growth, improve provision of services and reduce the financial burden on the state (Helm and Tindall, 2009; Marshall, 2010). This was largely influenced by the change of political ideology of the government from capitalist to socialist, leading to reduction of state control. They therefore adopted private sector investment for the financing of certain infrastructure sectors such as electricity, telecommunication etc. The UK experience shows that the success of any approach adopted by government depends on availability of finance and to a great extent on national priorities of the government. Even though UK, like many other nations, employ mixed approach, the efficiency and adequacy of the provided infrastructure depended on the government's ability to determine the needs of their citizen and also regulate all other stakeholders. The next section provided an overview of infrastructure development in Nigeria.

2.8 Infrastructure Development in Nigeria

Nigeria like any other nation in the world has its own stock of infrastructure which includes electricity, water, roads, telecommunication, educational health facilities etc.

Nigeria practices decentralised system of governance and approach to infrastructure provision whereby the three tiers of government are responsible for infrastructure provision. The constitution of Nigeria provides for the creation of subnational levels of government (state and local governments) as autonomous federating entities of the republic. It further saddles them, through the concurrent and residual legislative lists, with the responsibilities of provision of infrastructure within their states and locality. These levels of government perform their functions through policies which are implemented by ministries, departments and agencies while the bulk of finance is from budget allocation. Although the local government is at the vantage position (being closest to the local people) to collaborate with the communities in evaluating, prioritizing and meeting community needs, however they lack sufficient funds to implement most of these responsibilities. No wonder Nigerian infrastructure development is plague with traditional inefficiency associated with public monopolies of infrastructures provision.

2.8.1 Strategies for Infrastructure Development and Dynamics of Sub-urban area

Infrastructure provision in Nigeria is largely characterized by the predominance of state. It is therefore difficult to separate the style of governance and the strategy adopted by the Nigerian government which has had untold effect on the poor state of infrastructure facilities and subsequently affect the urban environment, economy and quality of life. However, the extent of its efficiency and adequacy are questionable. Adebayo (2006) and Ogu (2011) identified three main strategies used for infrastructure development in Nigeria; they are state provision, private provision, and international-led participatory approach. The first two approaches are generally employed by the Nigerian government, with state provision as the most popular and widely accepted approach and government allocations and budget are the main source of finance. The third strategy is unpopular with the Nigerian government and the development agencies; this is largely due to government's philosophy that it is the responsibility of the Nigerian government to provide all infrastructure development.

Furthermore, the inability to involve local communities in most development programmes stems from the style of governance being practised in Nigeria which includes the administrative arrangement. The post-colonial government adopted centralised governance after Nigeria's independence in 1960 which centralised all the

development programmes in Nigeria rather than being people oriented thereby creating a wide gap between the state and the people. The three tiers of government practised during the colonial government was discarded in favour of centralised regional governments. Regions were granted the autonomy and power to mobilise and encourage developments. However, they lacked the connections with indigenous institutions and failed to promote equal distribution of development. Rather, focus was on the development of few popular urban centres at the detriment of other sub-urban and rural areas in spite of the fact that the number of Nigerians living in the rural areas lacking good infrastructure was three times more than urban dwellers (Akinola, 2010)

Nevertheless, in the mid-70s the three-tier governance was restored with the creation of more states and local government authorities. These lower governments are empowered to ensure the physical and economic development of their states and localities. Various attempts were made by the Nigerian government to regulate the provision of infrastructure development and it began with the promulgation of Nigerian Town and Country Planning Act of 1946. The law established planning schemes and planning authorities to guide the planning, improvement and development of different parts of Nigeria. The 1946 Planning Act controlled the land-use planning and provision of infrastructure in the European Reservation Areas, however the traditional settlements were neglected (Oyesiku, 1998). The 1946 Act was designed to control land-use development through planning schemes and to ensure *"adequate provisions are made for roads, buildings and other structures amenities, public utility services, transport communications and other uses to which land is put, harmonized interrelationship among these competing land uses through the principle of zoning"* (Oyesiku, 1998, pp. 46-47).

The 1946 Act further served as the foundation of the prevalent development policies in Nigeria, however there is no provision for participatory decision making process and complaints which necessitated the promulgation of other policies and decrees to address these challenges. They include Mineral Act (1945) (drainage and pollution), Land Development Law of 1948 (roads and acquisition and sale of land), Building Lines Regulation (1948) which later became Chapter 24 of the Laws of Nigeria (1948) (building and road constructions) and Urban and Regional Planning Decree No. 88 of 1992 (Andah, 1995; Sulaiman and Ojo, 2014). Apart from these major legislations, Nigerian government also implemented various National Development Plans (NDP),

which focused on policies, programmes and projects for achieving uniform development in Nigeria. The development plans of 1946-1956 and 1956-1962, highlighted sectoral growth of the economy at the expense of regional planning and infrastructure development projects. Unfortunately, they failed to translate into even distribution of physical planning, social infrastructure and quality environment as emphasis was on tourist, mine and agriculture towns. More efforts were made to improve infrastructure development post-independence (Table 2.6).

Table 2. 6: Infrastructure policies in Nigeria after Independence

Period	Policies	Objectives
1962-1968	First Phase National Development Plan	• Post-colonisation development strategies. • Education, health, and access to employment
1970-1974	Second Phase National Development Plan	• Post-civil war reconstruction and development strategies of the country. • It prioritized transportation, defence, electricity, water supply, agriculture and provision of social services
1975-1980	Third Phase National Development Plan	• Similar to the second phase Nigerian. • Promulgation of Land Use Act No 6 of 1978 to increase access to land for infrastructure developments. • River Basin Development Authorities were established across the country in order to increase the provision of portable water and rural roads.
1981-1985	Fourth Phase National Development Plan	• Promotion of the bottom of the pyramid
1986-1988	Policy-oriented planning and Structural Adjustment Programme	• Improving of the macroeconomic performance of the country
1990-1993	Three-year rolling plan model	• The objectives include higher economic growth rates, building a strong foundation for a self-reliant industrial development, employment creation, increasing food production for food security
1996-1998	The era of political transition	• The preparation for the return to civilian rule.
1999-2006	Era of the nascent democracy	• The consolidation of the civilian rule
2007-2011	The crisis era	• Rapid economic growth and development, better income distribution, improved welfare of citizenry, reduction of poverty

Source: Osabuohien *et al.* (2014, p. 11)

Unfortunately, most of the post-independence policies were unsuccessful due to inadequate funding. Nigerian's accrued oil wealth was mismanaged and~~rather~~ there was mass unemployment, inadequate infrastructure and poverty. The implementation

of the development plans was further hindered by the breakdown of democratic rule and lack of commitment which resulted in political and economic instability. For example, the establishment of Infrastructure Development Fund (IDF) in 1985 for the financing of urban development projects was suspended by the military rulers. There remain persistent inadequate and poor basic infrastructure and housing; unemployment; ineffective legal and institutional framework for planning, etc. (Oyesiku, 1998; Osabuohien *et al.*, 2014). In the recent past, more strategies were adopted to address infrastructure development such as National Economic Empowerment and Development Strategy (NEEDS) (2003-2007). Subsequently, state and local governments were directed to establish their versions of the development policy - State Economic Empowerment and Development Strategy (SEEDS) and Local Economic Empowerment and Development Strategy (LEEDS) respectively. Likewise, due to lack of commitment and ineffective monitoring not all the state and local governments complied and the wider effect of the policy was cut short.

In 2007, Nigerian government adopted Vision 20:20 policy. It is a long term plan addressing education, critical infrastructure, land reform, food security, wealth creation, national security and Niger Delta. Vision 20:20 policy acknowledged the role of infrastructure development in the improvement of Nigeria's economy and the Nigerian government also hopes to raise the country's ranking to be among the top 20 developed economies in the world by the year 2020. To achieve the Vision 20:20, National Physical Development Plan (NPDP) was adopted by the Federal Ministry of Works, Housing and Urban Development with a recommendation to consolidate all the strategic regional development initiatives in Nigeria to be in effect for twenty years (2010-2030). It will also provide an overall strategic framework to guide infrastructure development and investment at all levels of government in Nigeria as well as provide harmonization of regional needs and state master plans into the national scheme.

Most states in Nigeria uses master plan as a tool for guiding development in their states, however, therefore the Federal Government of Nigerian instituted a National Integrated Infrastructure Master Plan (NIIMP) with a thirty-year horizon from 2014-2043. The need to guide and control physical development in order to cope with rapid population growth prompted the state government to develop master plans for Akure city in 1983, but the current plan expired in 2000 (Olujimi and Gbadamosi, 2007). The outdated masterplan also had limitations as local communities, who are critical

stakeholders, were not consulted during the development process rather it was simply planned by the consultant and government officials even though a comprehensive approach was adopted.

Unfortunately, the culture of centralised development is still prominent in Nigeria as much of existing infrastructure are still focused in urban areas, the state capital and local government headquarters, to the detriment of other areas. The impoverished area became more pronounced especially after the crash of the oil boom which led to increased population of the few developed urban centres due to rural-urban migrants seeking better life. Akinola (2000) reported that 90% of rural and suburban dwellers travel through bad and untarred roads to the city centre. The influx of people into the urban area and the demand for infrastructure is leading to expansion of the urban areas with certain land uses being pushed or deliberately relocated to the suburban areas of the cities, especially land uses requiring large spaces such as factories, and residential estates. Sub-urban areas are the interface between the rural and urban areas, they are land areas which support and accommodate the physical expansion and population growth of the urban areas and overtime are integrated with the urban areas of the city. They are often heterogeneous in nature and referred to as peri-urban, urban fringe, urban periphery, urban edge (Antrop, 2004).

Like the Urban and rural areas, sub-urban areas also have geographical, demographic and economic distinctions. They are characterised by low density land use and have mixture of economic activities such as education and residential. Kährik and Tammaru (2008) and Kombe (2005) identifies two major factors influencing movement to the suburban areas; they are availability of cheaper residential accommodation and land by lower income groups while the higher income group relocate in search of environmentally friendly and accessible area to build new distinct family dwellings far away from the congestion of the core area of the city centres. In Nigeria however there is a problem with the definition of a suburban area as land use development are simply classified as rural or urban areas based on government official definition. The rural areas are classified as the exterior and inaccessible areas while the interior areas are classified as urban area and zoning is used to allocate land uses to various locations while master plan guides land-use development but requires continuous updating.

In recent times, there have been various criticisms regarding the effective use of the master plan due to government bureaucracy and inability to cope with the increasing rate of urbanisation, leading to rapid changes in land-use development and inadequate infrastructure provision. In Nigeria, a settlement with a population of 20,000 persons is regarded as an urban area but in most cases may not perform multiple functions with secondary and tertiary activities expected of an urban area or even possess the needed infrastructural facilities. Whereas in Europe or North America, a settlement of 2,000 persons often have the basic amenities such as electricity and internet facilities which allows residents to render professional and high skilled services from their homes (Pow, 2009).

2.9 Overview of Water and Road Infrastructures Development in Nigeria.

2.9.1 Water Supply

Water provision is fundamentally the responsibility of all levels of governments in Nigeria because access to water is considered as a universal and statutory right. There are human rights, economic and public health benefits connected from access to adequate water supply especially safe drinking water (Kayser *et al.*, 2013). The Federal Government is involved in bulk water supply through the Federal Ministry of Water Resources (FMWR) and the eleven River Basin Development Authorities (RBDAs) while all the thirty-six States and the Federal Capital Territory have State Water Agencies (SWA's) managing their public water supply (see Table 2.7).

Table 2. 7: Roles of Key Government Agencies in Nigeria

AGENCY	ROLE
Federal Ministry of Water Resources (FMWR)	▪ Formulation and implementation of policies for overall water resources management; ▪ Monitoring and coordination of water resources development.
SWAs	▪ Manage and operate systems for water service delivery in urban areas; ▪ License and monitor private water supply and monitor water quality; ▪ Provide technical assistance to the LGAs.
LGAs	▪ Rural WSS service; ▪ Establish, fund, and equip Water and Environment Sanitation (WES) departments. ▪ establishing local water, sanitation and hygiene (WASH) departments
RBDAs	▪ Suppliers of bulk water in 12 jurisdictions. ▪ Reservoir and water resources management.

Source: Adapted from USAID (2010).

Most SWAs were established as corporate organisations to control and manage water infrastructure and water service delivery in all urban and rural urban areas. SWAs were planned to be autonomous and self-accounting even though they are fully owned by State government but on the contrary the operational efficiency of most of the SWAs is low as they still operate under the civil service rules and relies on financial support from their State government. The efforts of these SWA's are supplemented by 774 Local Governments Authorities in Nigeria and are responsible for rural water schemes for provision of water to communities and small villages in their jurisdictions however, majority of the LGAs does not have the resources and skills to address local water needs or establish local water, sanitation and hygiene departments. Figure 2.4 shows the graphic representation of agencies in charge of water resources management in Nigeria.

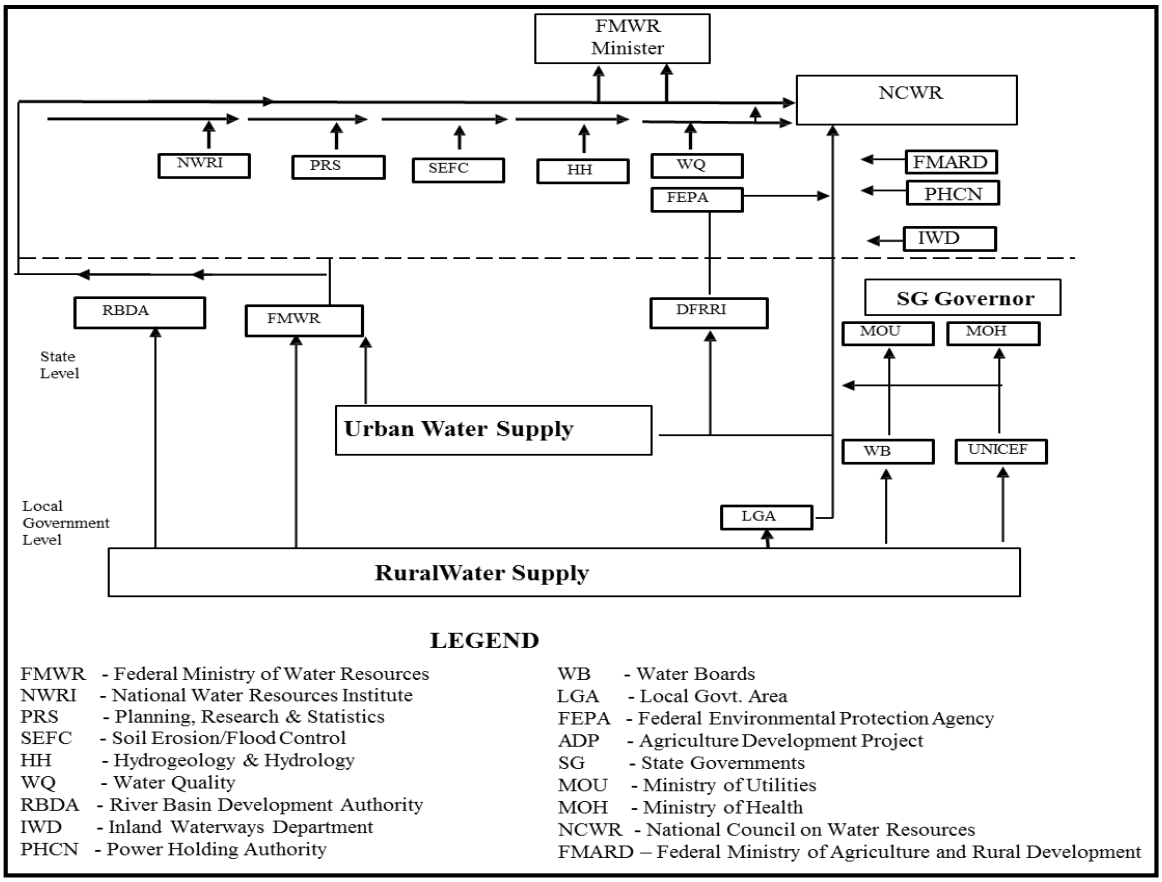

Figure 2.3: Graphic Representation of Organisation of Water Resources Management in Nigeria
Source: Adapted from Nwankwoala (2014, p. 15)

The Federal Ministry of Water Resources have the mandate for formulating and coordinating national water policies (see Table 2.8). The Nigerian Water and Sanitation Policy stipulate that water should be regarded as social services as well as an

economic good but SWAs were encouraged to make potable water supply free as much as possible and easily accessible to all Nigerians through participatory investment by the three tiers of government, the private sector and the beneficiary (Olajuyigbe and Fasakin, 2010; Idowu *et al.*, 2012).

Table 2. 8: Relevant Water Policies in Nigeria

Policy Title	Key Provision
National Policy on Environment, 1989	Focuses on water quality regulation and standard as well as pollution control.
National Rural Water Supply and Sanitation Policy, 2000	Focuses specifically on rural water and sanitation through community participation. The programme targets were to increase water supply coverage from 43% to 80 % by 2010 and 100% by 2015. The sanitation coverage was to be increased from 32 % to 60 % by 2010 and 90 % by 2015.
National Water Resources Management Policy, 2003	This recognizes water as an economic good, opted for integrated and demand-driven services.
National Water and Sanitation Policy, 2004	This operated strictly in line with the demand-driven approach of the National Water Resources Policy.
National Economic Empowerment and Development Strategy NEEDS (2003-2007)	Address water and sanitation issues in clearly defined spatial units namely, urban areas, small towns, rural areas. NEEDS placed high priority on the development of safe and adequate water supply and sanitation services as a key instrument for fighting poverty and accelerating socio-economic development.
National Development Plan (NDP), 2007	Targeted subsidies on water and sanitation facilities with more focused on water provision for the poor in order to reduce poverty.

Source: Adapted from (Akpabio, 2012)

Idowu *et al.* (2012), emphasized other elements of the policy which include the following:

- Nationwide increase of service coverage for water supply and sanitation to meet the level of socio-economic demand of the nation;
- Ensure good water quality standards and affordable access to basic water supply and sanitation by the poor;
- Improve national capacity in the operation and management of water sector to attain and maintain internationally acceptable standards;
- Adequate protection for the poor where there is need to privatise of water supply and wastewater service.

The policy stipulates the minimum national standard of water supply of 120 litre person per day for urban areas of population greater than 20,000, with full reticulation and consumer premises connection while 30 litres per person per day for rural area (150 - 5000 people) within 250m of the community which should serve approximately 250–500 persons per water point. A suburban area (5,000 – 20,000 people) with some economic activities and reasonable measure of social infrastructure should have minimum water supply of 60 litres per person per day with reticulation, and limited or full house connections (Acey, 2007; Idowu *et al.*, 2012).

A World Health Organisation study revealed an increase in the population of Nigeria populations with access to domestic water supply of over 50 l/p/d per day within their residences from only 47% in 2000 to 58% in 2008. The study however showed a decline in access to improved water source from 79% in 1990, to 77% and 75% in 2000 and 2008 respectively. It further revealed a decline in the access to potable water supply from public mains - 14% in 1990 to 6% in 2008 (Idowu *et al.*, 2012; Unicef, 2012; Nwankwoala, 2014). The data is substantiated by the last Nigerian population census which revealed that well water supply is the highest source of domestic water supply in Akure South Local Government (71, 390) while harvested rain water (4,237) is next available choice for Akure residents (see Table 2.9). Rain water is seasonal and well also dry up during the dry season which limits the availability of these sources of water supply. Furthermore, both sources are not pure and cannot be considered as good sources of drinking water.

Table 2. 9: Sources of Domestic Water Supply in Akure City

Main source of water	Dwellings	Percentage (%)
Well	71, 390	87.73
Rain water	4237	4.85
River/ Stream/Spring	3460	3.96
borehole	2811	3.22
Pipe borne water inside the dwelling	1902	2.18
Pipe borne water outside the dwelling	1669	1.91
Tanker supply/water vendor	1341	1.54
Dugout/Pond/Lake/Dam/Pool	138	0.17
Others	403	0.46
Total	87, 351	100

Source: National Population (2006, p. 195)

Most state water agencies (SWAs) have failed in their responsibility of provision of access to improve water supply and upgrading of water facilities as there is also huge disparities between supply to rural and urban areas in Nigeria with 72 % of urban dwellers having access to improved water sources compared to 47 % of the rural population (WHO/UNICEF, 2010; Onabolu *et al.*, 2011). Water provision is in shortage in Nigeria despite the abundance water resources in Nigeria. The estimated groundwater and surface water resources are about 52 billion m^3/annum and 267 billion m^3/annum respectively while the average annual withdrawal is 3.63 billion m^3/annum (Hanidu, 1990; Akujieze *et al.*, 2003; ADB, 2007; Akpabio, 2012; Idowu *et al.*, 2012; Nwankwoala, 2014). Surface water is not a reliable source while ground water is most commonly exploited in Nigeria in the form of boreholes and hand dug wells and over the years have become the most essential sources of public and private water (Idowu *et al.*, 2012; Nwankwoala, 2014). Nevertheless public water supply in Nigerian cities is declining and demand is higher than supply (Ohwo, 2016).

The inability of government to maintain public supply led to privatization of some SWAs and restriction of public water supply to areas that could afford the commercial rate. The consumers who could not afford the commercial rate have their supplies cut off or depend on alternative sources of supply such as boreholes and deep wells for their daily need (Nubi, 2003; Montgomery and Elimelech, 2007; Aribigbola, 2010). Factors affecting efficient water supply in Nigeria include insufficient fund availability for day to day operation, inappropriate technology; poor management; legal framework problems; lack of accountability and organizational structure of the State Water Agencies (SWAs) and lack of trained manpower (USAID, 1984; WorldBank, 1994; Unicef, 2012; Ohwo, 2016).

Furthermore Akpabio (2012) stated that institutional improvement of water supply can only be achieved through the provision of adequate finance and rising block tariffs whereby households are charged affordable cost for adequate and regular supply. Likewise, only household connected to public supply should be charge with average increment costs of metered uses. Kalbermatten (1999), however emphasized that technologies and methods that lower the cost of services must be used so as to allow low-income users benefit from services. The benefits of adequate water supply is great most especially its effects on health and productivity and it is time savings (Arouna and Dabbert, 2010). Water infrastructure developments must be considered as continuous

long-term process which needs careful planning, implementation and management therefore, there is a vital need for integration of both theory and practice such as local knowledge, custom and particular needs of local communities in planning government's programmes.

2.9.2 Road Infrastructures

Nigeria has a total land area of about 925,000 square kilometres and total road network of 200,000 kilometres however only 65% are paved with asphalt covering (FMW, 2012). Road transportation amounts to 90% of all inland transportation which shows an over dependence on road network in the country. Nigeria's road networks are classified into three types, Trunk A (federal highways); Trunk B (urban roads) and Trunk C (local/community roads). Figure 2.4 shows the ownership structure of the road networks in Nigeria.

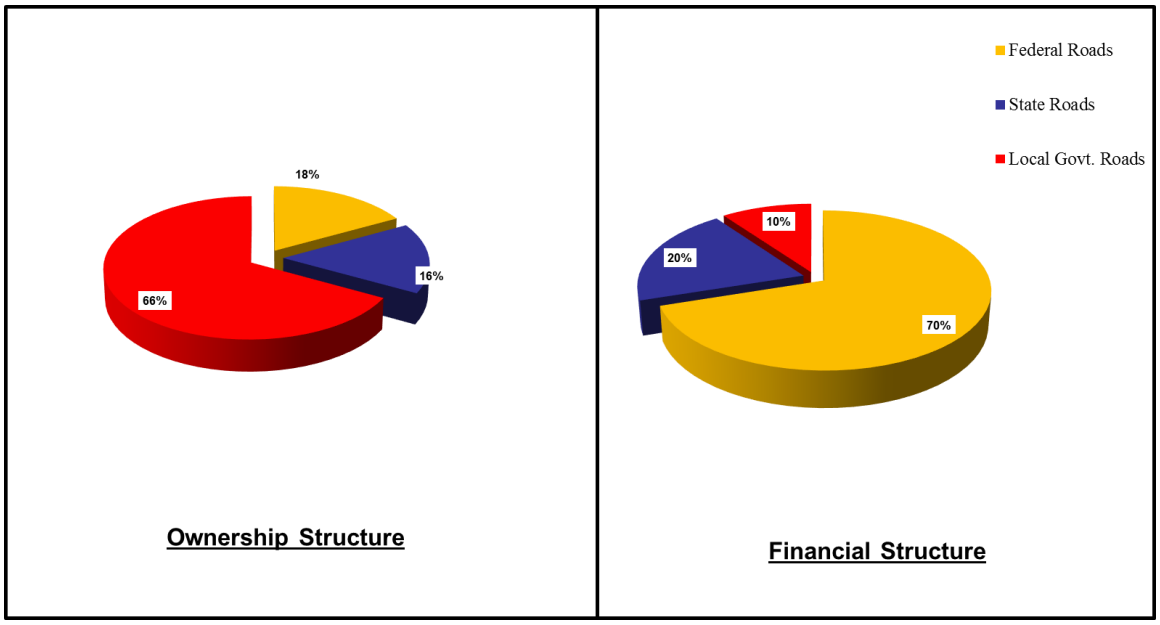

Figure 2. 4: Ownership and Economic Service Structure of Road Network in Nigeria
Source: Onolememen (2012, p. 3)

The local government has the highest share of road network and responsibility of 66% which is more that the combinations of the responsibilities of the state and federal government. While the economic service for local is just 10% while the federal government has 70% even though there are more local access roads than urban and federal highway. There are different institutions responsible for the financing and maintenance of roads in the Nigeria (Table 2.8). The provision of road infrastructure is

shared among all the subnational governments and top-down decision process is adopted.

Table 2. 10: Road Classification in Nigeria

CLASSIFICATION	AGENCY	ROLE	ROAD NETWORK	
			KM	%
Trunk A (federal highways)	National Planning Commission (NPC).	Planning	34,123	16.5
	The Federal Ministry of Finance is responsible for budgeting and financing	Financing		
	Federal Road Maintenance Agency	Maintenance		
	Federal Ministry of Agriculture and Water Resources	Rehabilitation and construction		
	Federal Ministry of Transport			
Trunk B (Urban roads)	State Ministries of Works	Planning, finance, construction, maintenance	30,500	5.8
	State Road Maintenance Agencies	maintenance and rehabilitation		
Trunk C (local / community roads)	All Local Government Authorities	construction, maintenance and rehabilitation	129,577	67.7

Source: Author's compilation.

The Federal highways are road networks linking the state capitals and other major towns while urban roads networks connect all the major settlements and local roads are access routes within local communities. More than 80% of the existing road networks in Nigeria are in poor condition (Emeasoba and Ogbuefi, 2013). Nigeria has a road density of 0.21 km of road per square km of land area, which compares well with an average of 0.06 km per sq. km for the West and Central Africa regions combined. Most of the intra- and inter-city road networks built during the oil boom in Nigeria have fallen into a state of disrepair due to poor management and neglect (Emeasoba and Ogbuefi, 2013). In 2002 the Federal Government of Nigeria established the Federal Roads Maintenance Agency (FERMA) to carry out regular routine maintenance of the entire federal road network within the country.

Furthermore in 2009 the Federal Government of Nigeria estimated about N500 billion Naira for repair and maintenance of all the federal trunk roads over a period of ten (10) years (Oni and Okanlawon, 2006) while the repairs of state and local road network are left to these subnational level of government. Consequently, this means long-term

implications which are not helped by frequent changes in political power and structure. This resulted in unstable policies and insufficient funding for construction and maintenance of road network therefore potholes and bumps are ever-present on most roads in Nigeria. Also most traffics accidents in the country are due to the poor state of the roads such as cracks of various geometric patterns, rutting and potholes left unrepaired which are worse during the raining season (Adeyemo and Salami, 2008; Aribigbola, 2011; Emeasoba and Ogbuefi, 2013). The state of most Nigerian roads has remained very poor with various obstacles to road improvement in Nigeria. Four reasons were outlined by the Bureau of Public Enterprises (2008) as the causes of bad road which includes lack of periodic maintenance; poor construction and the misuse of roads; overdependence on roads transportation and lastly institutional issues (Adeyemo and Salami, 2008).

Another problem is lack of good drainage system. Drainages are often constructed as part of road projects and are used to drain surface water. A drainage could either be open surface drainage and below ground drainage (Wong *et al.*, 2006). Most drainages in Nigeria, Akure inclusive, are often blocked with debris that has washed downstream during the raining season or sometimes thrown in by residents. This is further compounded by the lack of proper disposal of refuse mostly because of shortage of waste disposal facilities. There is inadequate waste bins or collection centres around the city and waste management authority collect refuse mostly from the city centre neglecting the suburban areas therefore most people find alternative means of disposing their domestic waste and the easiest means is to pour the refuse into the drainage with the expectation that it will be washed downstream.

In most cases they block the drainage which sometimes causes flood and erosion. Although various efforts have been taken by successive government to address problem of bad road network but yet, little has been achieved due to frequency of policy variation and government instability (Ogwumike, 1995). Individuals and community based organisations have taken it upon themselves to provide accessibility in their neighbourhood through self-help approach. This approach is as a result of Nigerians concern to provide alternative means to lack of good road network.

2.10 Reflection

There is a need for a change of approach and urgent intervention in the provision of infrastructure developments in Nigeria. Government's attempt to encourage broad distribution of infrastructure in Nigeria led to the adoption of technocratic top-down approach by all levels of government. The traditional top-down approach however does not allow community involvement in the decision process while the local communities are just recipients. The usual argument is that public sector provision is more efficient, promote equity and that it is expensive for an individual or communities to participate. However, the top-down approach is failing to provide adequate infrastructure and equal development most especially in the suburban areas. Adequacy of infrastructure involves the availability, accessibility, affordability and quality of infrastructure therefore failure of the policy-makers to have a good understanding of local community needs often result in inappropriate approaches and inadequate provision. This in turn results in the failure of the top-down approaches in achieving the designed objectives while Nigerian citizens are forced seek alternative means of meeting their need through self-help and collective approach according to their level of income or available finance.

The lack of consultation may be accountable for the failure of government strategies as appropriate data are needed to formulate right policies as in development planning. In Nigeria major challenges of infrastructure development are non-availability of data and lack of clear understanding of the socio-economic, environmental and political problems peculiar to the suburban areas. In most cases planning authorities overlook the infrastructure needs within the suburban areas despite their proximity to urban centre as they are often considered as part of the urban areas. Thus there is tremendous need for availability of relevant and current data without which there will continue to be a huge gap between governments assumed are the problems, policies and the reality instead of wasting money and time on formulating and implementing ineffective programmes.

Currently the provision of road and water infrastructure is inadequate as many residents does not have access to potable water supply but rather make do with well and rain water which cannot be said to be improve source of water supply while the percentage of the Nigerian road network allocated to the local government is greater than their financial capacity. The adequacy of water infrastructure is beyond the availability rather it should be readily accessible within the residence. However, data

showed that over 87% of residents of Akure city depends on well water for their daily supply while most of the communities rely on the local government to provide accessible road network. Nigerians are therefore force to provide alternative means to supplement government provision as there is ever increasing demand for road and water infrastructure. Likewise, there is a growing clamour for local community participation most especially from international donors which is believe to improve the accessibility and availability, however communities will need to be empowered in order to improve affordability and quality. This will improve the management of urban development at all levels of government and will subsequently increase adequacy of infrastructure provision and reduce capital expenditures.

Also there is an urgent need for government to change their conventional role as 'provider' to 'enabler' by encouraging private sector and community's involvement in infrastructure finance and development. A change of role might improve the willingness of users to pay for service since they will be involve in the decision process and implantation (Azizi, 2000; Acey, 2010). Although some users will not pay due to the fact that they see infrastructures as a free public good which should be provided by the public sector. Also the nature of some infrastructure like road makes it difficult to prevent such people from benefiting public or communal projects. However, it easier for private sectors to enforce compliance through taxes and charges e.g. toll fee for road usage, tickets for parking lots usage etc. Some authors emphasised the need for community participation as they noted in their research that most low-income householders are willing to accept the cost and responsibility of provision of infrastructure, in as much as the charges are reasonable, inexpensive, realistic, equitably distributed across all socio economic groups and if it will improve efficiency and management (Paul, 1987; Jones and Ward, 1994; Azizi, 2000).

Furthermore, Stiglitz (2002) argued that imposed reforms may fail to achieve desire changes may have worked in other countries because of the heterogeneity of human. The question therefore is whether community participation can improve adequacy of infrastructure provision and it there is true community participation? If so how and what are the factors influencing it. In this research community participation is not seen only as just a means for local communities to meet their basic needs but as an avenue to control affecting their lives.

2.11 Chapter Summary

The review of literatures in this chapter showed that infrastructure is a necessity and not a luxury; they are major determinant of the quality of life and economic growth of nations. Also discussed in this chapter are the characteristic of infrastructure development, various approaches to infrastructure provision and the factors that limit the efficiency of government strategies and the outcomes of infrastructure projects. The overview of infrastructure development in Nigeria was also discussed and it highlighted that central system is the prominent approach adopted by the Nigerian government. The literature reviewed showed that there is no perfect approach as they all have shortcomings and requires effective institutional framework, availability of fund and good management strategy.

Chapter 3. Community Participation

3.1 Introduction

This chapter is focused on the main debates around community participation. In order to examine the different levels of community involvement in infrastructure development, there is the need to understand the notion of community and the concept of participation. The different models and approaches to community participation are examined. The theoretical framework underpinning this study is also discussed.

3.2 Community and Community Participation: Definitions and Debates

3.2.1 What is a Community?

'MacQueen *et al.* (2001, p. 144) defined a community as a collection of people occupying a geographical location, sharing common views, social ties and engaging in joint action. They believed that the area designated as a community must have a degree of intensity distinguishing it from other areas and that the common life should have some unique characteristics. The debates around the meaning of community includes diverse sociological and anthropological views such as the claim that community and modernity are incompatible and untenable which leads argument about community based on location and virtual community. Virtual community is a community that develops around interests, skills and relationships without necessary reference to a location but on diversity. It is a cyberspace community that is made up of individuals connected by electronic communication technology. These individuals may never meet but they share interest with other people located in remote places and the likelihood of them meeting is far removed. The proponents of virtual communities argue that it is an acceptable standard for defining a community since there are common goals, social relation and communication. It provides a refuge for social isolates that seek the freedom to associate or withdraw from a community (Gusfield, 1975; Berlin, 1997)

Other researchers disagree with this notion, rather they consider virtual communities as imagined, unreal and also as reducing interrelationship. Virtual communities are devoid of face to face social interaction, physical contact and geographical setting. Social interaction is limited and could easily be interrupted. This is a major criticism of modern society (Greeley, 1992; Putnam and Borko, 2000; Driskell and Lyon, 2002; Bellah *et al.*, 2007). Communities are guided by systems of values, norms and moral codes which promote a sense of identity and boundary. The boundary may not be

visible but it is very important to those occupying the bounded area as they take pride in referring to 'their community' with all the sentiments attached to friendship, neighbouring, kingship and other attributes of the social interaction of everyday life (Cohen, 2013).

The arguments about the meaning of "community," remained unresolved, however a common definition of community emerged over the years as 'a group of people with diverse socio-economic characteristics who are linked by social ties, sharing common perspectives and engaging in communal action within a geographical locations or boundary. This definition is generally accepted by many authors whose research setting is locational (Sinikka Dixon, 1999; MacQueen *et al.*, 2001; Brugge and Kole, 2003; Nyamathi *et al.*, 2004; Grant, 2006; Jabareen and Carmon, 2010). For the purpose of this research, I adopted this definition of 'community'. The groups of people may not necessarily be related by blood or kingship but they must be located within the same geographical area and engaging in collective action. The geographical area here refers to the sub-urban area of Akure city and an association refers to any of the community based organisations established by the local people to pursue one or more common interests such as infrastructure provision. The communities selected in this thesis are located in the sub-urban area of the city which consists of migrants from urban and rural areas and original settlers. This research hopes to provide a clearer understanding of the cultural, social and spatial aspect of the communities that promote participation in geographical settings. Therefore, what is participation?

3.2.2 What is Participation?

Participation is a concept that involves shifts in power between people, policy makers and institutions in charge of resource allocations; within communities and the structure of those organisations (Nelson and Wright, 1995). There have been various attempts to create an abstract order of participation positioning people differently in relation to the development agency or as objects of a process of political and economic transformation (WorldBank, 1994). This could be as expected beneficiaries of programmes with pre-set parameters, or as citizens trying to determine their own choices and direction of development process. Arnstein (1969) is one of the early attempts to create an abstract order of participation (later discussed in the research). The issue of participation is a growing interest to academics, practitioners, regulators and governments. While some use it to connote active participation in political decision

process, development economist equate it to sharing of the project benefits. It is also viewed as a way of enhancing the efficiency of projects or production of services.

Participation can involve a top-down or bottom-up process. It can be advocated for different objectives and sometimes considered as ‘a means to an end’ or as ‘an end’ in itself. Participation as a means to an end is regarded as the mobilisation of people with the aim of achieving a desired goal. This type of participation can easily be disguised and it is more difficult to measure, it is often a process which is measured in goals. Participation as ‘an end’ is considered as the transfer of right with the objectives of increasing the right of groups within a community. However, participation depends on the objectives of the participants, which could either be output-oriented goals or socially-oriented goals (Paul, 1987; Leach *et al.*, 1997; Leach and Wingfield, 1999; Rowe and Frewer, 2004).

3.2.3 Community Participation

Community participation is synonymous to citizen participation and public participation. It is the involvement of the local people in the planning, implementation and delivery of developmental projects in their neighbourhood. The degree, method and forms of involvement differ from one community to the other which could be as a result of different factors such as culture, education, social and economic background (Korten, 1990; Sheng, 1992; Akin and Oyetunji, 2010). Community participation promotes a partnership between resident of same neighbourhood; the government or authorities in charge of the development and those who formulates policies, it is more than simply attending community meetings or consultation (Gounden, 1993; Rebori, 2000).

Burns *et al.* (2004) further describes it as the engagement of communities and individuals in decisions process about things that affect their lives. Khan (1990) sees it as indigenous, decentralised and homogenous local organisation whereby all those having common goals and whose interest are best served by collaboration are involved in development process. Decentralised means that decision-making is the responsibility of the local people or community organisations while they are supported by agencies either government or non-governmental development agencies that provide technical and financial assistance. In other words, community participation ensures that development projects meet the needs of the recipient communities and that it is of, for, and by the people. Community participation involves an extensive

commitment from recipient community irrespective of who benefits or not. Apart from collective manual labour and attendance at meetings etc. community participation might include financial contribution, collection of signatories to petitions to city authorities, taking part in demonstration and organising bazaars or lotteries to generate funds for communal use.

Various authors' associate community participation with the movements of pluralism and egalitarianism as an acceptable form of governance at the expense of the managerial model of public administration. This is due to declining public confidence in the traditional model of public administration which results in government and their various agencies seeking public views on policies. (Laird, 1993; Dryzek, 1999; Rowe and Frewer, 2004). The application of community participation in the development process around the world began in the late 1970s after much criticism of the traditional top-down approach to implementation of community development programs as it failed to involve recipient communities. Development policy began to focus around the idea of basic human needs and the importance of local community involvement. Many international aid donors and development organisations encourage community participation by adopting participatory approach in most of their community development projects (Midgley *et al.*, 1986; Kothari and Cooke, 2001).

Community participation has also been used for different outcomes ranging from development process to political context. It is used for poverty alleviation outcomes through the involvement of community residents in income generation initiatives. These initiatives provide employment opportunities; income benefits and development of new skills. Community participation also leads to elimination of social exclusion. The involvement of women groups and other socially excluded groups who are usually regarded as vulnerable groups in participatory initiative changes the tradition power relations. It usually leads to more right and power of influence on decision process by these groups (Plummer, 1999; McFarlane, 2001). Abbott (1995) differentiated empowerment approach from manipulation and government control. He considered empowerment as an impossible outcome because interaction between communities and government usually result in confrontation. As such, it is considered as mere waste of time

The main argument in support of community participation lies in the benefit of the process most especially the involvement of projects beneficiaries in planning and the control of resources which explains the reason many aid institutions such as the World Bank adopt the idea of community participation in their development initiatives and projects (Midgley *et al.*, 1986; WorldBank, 1994; Nelson and Wright, 1995; Bhattacharyya, 2004). Community participation was introduced to development projects in late 1970s as a result of the failure of top-down approach to development process as a result of centrally controlled decisions and finances (Paul, 1987; Imperato and Ruster, 1999; Cornwall, 2008). In a narrow sense community participation is the involvement of the intended beneficiaries of a specific programme in the decision-making process and the implementation of the project. The beneficiaries in this research are identified as the local communities, which include residents, community leaders and community based organisation etc.

In this thesis, community participation is the active involvement of local residents in the decision process, control of resources and implementation of infrastructure development projects within local groups. Access to adequate infrastructure is important for the improvement of quality of life and economic growth, however due to bureaucracy process, government provision and abject needs, communities can no longer rely on the state for provision of adequate infrastructure. In Nigeria, many residents procure lands for housing development from the private sector which include both formal (surveyed and registered) and informal private layout which often comes without any provision of infrastructure. Therefore, many residents necessarily seek alternative means of meeting their basic infrastructure needs. The most popular alternatives available to communities is community participation. Paul (1987) listed capacity building, empowerment, sharing of projects cost, increasing project effectiveness and improving project efficiency the objectives of community participation.

On the other hand, community participation might seem the easiest option available to local people however it is not a costless process either. It takes money, time and skill to organize and sustain participation. For the poor or a vulnerable members of a community (widow, old), the short term opportunity costs of active participation could be quite high and relatively expensive. The same can be said for project agencies as the initial investment in getting participation under way usually means additional cost

to projects. In this case the objectives will then be limited to other factors apart from sharing of cost of project. Community participation also improves beneficiary needs; attitudes; customs and tradition; skills and motivation. This helps to ensure the provision of appropriate projects and services that meet the needs of the beneficiary. Of what benefit is the provision of a market for a community that will be abandoned as a result of a breach of their custom? Or a road that the community will refuse to use? Unfortunately, some finished projects are abandoned by the supposed beneficiaries for reasons of breach of custom or beliefs (Abegunde, 2011).

Common problems that are encountered in community participation include: difficulty of citizens identifying with a community; limited number of residents participating and difficulty in designing an effective and lasting process (Midgley *et al.*, 1986; Akin and Oyetunji, 2010). Community participation also allows communities a share of the responsibility of issues regarding the improvement of their standard of living rather than depending solely on the public agencies. The importance of this is that community participation begins and ends with people and the involvement of local people is expected to reduce the overhead costs of project and the cost of management and maintenance. Community projects belong to the communities where they are located, which should make it easier for the communities to accept the responsibility for the success or failure of the project (De Beer and Swanepoel, 1998). This was buttressed by (Mustafa *et al.*, 1997; Abegunde, 2011) that where there is effective participation it often leads to socially acceptable, economically feasible, sustainable and efficient projects. Community residents have the ability and mechanism to influence the decision and planning processes that affect their lives, environments and societies in order to improve it for themselves and future generations (Logolink, 2002).

On the other hand, not everybody supports community participation, some authors believe that community participation is often used to gloss over ‘colonised grass-root organisations’. They see participation as a waste of time, untrue, a facade or a way of government rubber stamping retrogressive ideas, inequality, injustice and exploitation (Dixon, 1991; Sandercock, 1994; Fraser, 2005). Davidson *et al.* (2007) further argued that community participation does not reflect the true capabilities of the users in reality, they are of the opinion that users’ involvement in up-front decision-making process can be easily manipulated to accept government’s preconceived ideas or programmes. Discussions on community participation remains increasingly popular and the

argument about the meaning and benefits is an ongoing debate. The typologies of community participation will be considered in the next section.

3.3 Typologies of Community Participation

There have been different models of participation over the years, notably is Arnstein's Ladder of citizen engagement which has served as the background and foundation for many urban policies, activist and models of community participation. There have been quite a number of modification to this ladder by different authors as illustrated in Figure 3.1 below.

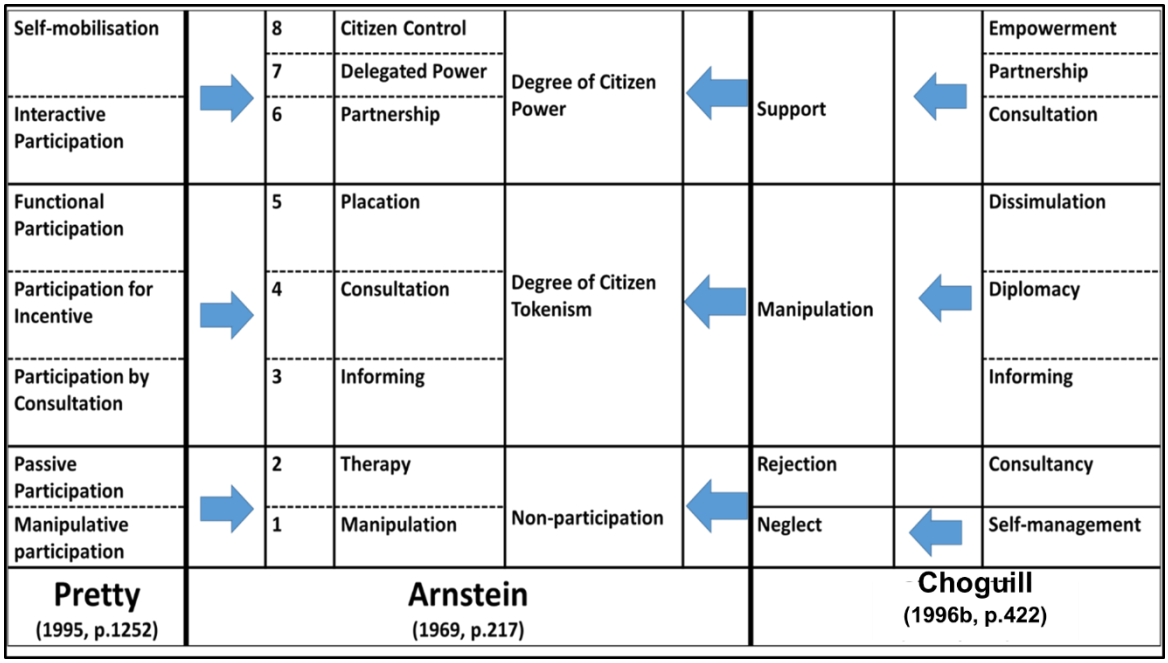

Figure 3. 1: Data Collection Strategy
Source: Adapted and modified from Pretty (1995); Arnstein (1969) and Choguill (1996b)

Paul (1987) modified the ladder to four rungs based on levels of intensity of community involvement and also distinguishes between the objectives, methods and degree of participation and several authors too (Pretty, 1995.; Choguill, 1996a; Tosun, 1999; Burns *et al.*, 2004; Innes and Booher, 2004). Tosun (1999) applied Arnstein's ladder to tourism and he simply classified his ladder of community participation into three levels the first two levels are coercive and induced participation. At these levels community participation is indirect, passive and top-down approach. The last level of Tosun (1999) ladder is spontaneous participation. At this level he considered participation to be active, authentic bottom-up approach. Burns (1994) also attempted

to incorporate quality of engagement and degree of participations into his ladder of citizen participation, Wilcox (1994) modified Arnstein's (Ibid.) ladder to five rungs reflecting different aspect of user's involvement, contribution, association, self-determination and freedom while Sutton and Kemp (2002) and (Hart, 1992) applied Arnstein's model to their research which involved working with young people. The general conclusion is that there are different levels of participation beginning with the least participatory to the most participatory. Also each level has different degrees of power or right and government involvement.

Arnstein's (1969) model is considered by many authors as perhaps the best attempt to determine the different levels of participation. Her concept of the redistribution of power enabled the low-income who were socially excluded from the political and economic processes to participate in various programmes in the United States, programmes which include anti-poverty, urban renewal and Model Cities. She argued that her model of community participation can be extended to other areas. Arnstein's ladder; begins with non-participation level, which is regarded as manipulation and exploitation of citizen participation. She equated tokenism with placation; listening and sharing with information sharing and consultation; while at the top of her ladder is citizen power. This she equated with delegated power, partnership, and citizen control. Dichter (1995) however belief that the success of the application of Arnstein's ladder of community participation in communities with complex social dynamics will be difficult. Furthermore, the approach of many participatory projects are top-down with outsider in control and sometimes citizens or communities initiate different aspects of the project and by so doing manipulate the implementing agency leading to cooperation, harmony, mutual sharing, or good communication which promote participation. Other times there could be disharmony as a result of elite's manipulation and placation which may inevitably obstruct progress of projects or participation. In most cases the levels of participation depend on the interest and choices of participants and this will drive them towards attainment of control and power.

Table 3. 1: Interests in Participation

Form of Participation	Top-Down	Bottom-Up	Function
Nominal	Legitimation	Inclusion	Display
Instrumental	Efficiency	Cost	Means
Representatives	Sustainability	Leverage	Voice
Transformative	Empowerment	Empowerment	Means/End

Source: Adapted from White (1996, p. 144).

Table 3.1. Shows the importance of form and function in determinant of interests of participants while distinguishing four major types of participation. The first column shows the form of participation. White (1996) is of the opinion that the interest of those who plan and implement development programme flows from legitimate to empowerment depending of the level of power and authority they are ready to divulge to participants. While the interest of participants depends on what they hope to gain from participation. It must be noted that Choguill (1996b) considers Arnstein's ladder and most of its modification as inadequate for underdeveloped countries although they were applicable for the research undertaken by these different research. They are also only applicable for analysis in developed countries where organisations have the ability to influence user involvement in development process. Nevertheless, she did agree that Arnstein's model can indeed induce significant social reform, the end product being public policy. However, he believed that citizens of developing nations particularly those of the lower income community desire more than power or social reform. They need empowerment and adequate infrastructure provision and it is these needs that influences community participation.

Choguill (1996b) further suggests a classification based on the degree of the external institutional involvement in facilitating community mutual-help projects. Although he based his classification on the Arnstein's Ladder, he however modified the terminologies and arrangement to address the progressive improvement of infrastructure in under-developed countries. Choguill (1996b) ladder has eight rungs with empowerment at highest rung while self-management is the lowest level of participation as shown in figure 3.2 above. Fundamentally, his model is the input of outside assistance (government or non-governmental) and the fact that there are more constraints to community participation in development projects in the underdeveloped

countries compared with the developed. These constraints include political, financial technical and motivational. It is the situation where governments are not able to provide the needed infrastructures or the resources, communities resort to self-help. Choguill (1996b), is of the opinion that self-help also known as mutual-help is an essential component of community participation and an important instrument of achieving empowerment which enables local residents to provide infrastructures services. It also allows them to influence every decision making process affecting them. But then can development projects through self-management be considered a success? Can community participation improve the adequacy of infrastructure?

3.4 Community Participation: A Model for the Progressive Improvement of Infrastructure

Community participation gives the citizens more control over every issues and problems that affects them which may be difficult to solve without outside help either from the government or organisations as they provide the additional financial aid and technical assistances. While it may be easier for communities and individuals to provide water, provision of certain infrastructure such as electricity generation is beyond the reach of communities. There is a need for upgrading the approach employed by local communities to provide infrastructure development to acceptable standard. Choguill (1996a) suggests a model for progressive improvement of infrastructure development and listed ten principles for the upgrading of community projects developed in low-income communities as shown in Table 3.2.

Table 3. 2: A Sustainable Model for the Progressive Improvement of Infrastructure for Low Income Community

S/N	PRINCIPLES
1	Two inter-dependent circuit of infrastructure provision: Formal and informal sector
2	Town system to be operated by municipal authorities or nominated private firm on a full cost recovery basis
3	Irregular land tenure issues should be resolved within the informal residential sectors of the city
4	Informal infrastructure should be designed and built using external technical assistance as required, to be upgradable from a basic standard to that which can be incorporated, with time, into the town system
5	Informal infrastructure built by the local community should be under its control
6	The technology adopted for informal-sector infrastructure must be maintainable by the community
7	The informal structure must be affordable by its low-income users
8	Informal-sector infrastructure must be socially acceptable to the community involved
9	It is necessary that government adopt the role of facilitator and enabler rather than merely as provider
10	Non-governmental organisations can play a key role in assisting communities to develop infrastructure systems

Source: Adapted from Choguill (1996a, pp. 394-399)

Choguill (1996a) also identified finance, technology, institutional arrangements and politics as major constraints to infrastructural development. These constraints are central to the success of the application of his model likewise are the concepts of self-help, decentralisation of decision-making and progressive improvements. He considered his model a realistic approach to community development programmes by merging fundamentals of community involvement in infrastructure development with government intervention. He also redefined the role of government in community-based projects, to ‘enabler’ and not just provider. Government can enable local communities by providing finance and technical assistance while allowing the communities to be in control, develop, own and managed the project.

Choguill (1996a) cited two governmental programmes where government assumes the role of enabler by assisting communities in solving their problems and the programmes were considered successful. The first was the Community Construction Contracts initiated in Sri Lanka as part of the Million Houses Programme while the second was the Community Mortgage Programme in the Philippines. These programmes were successful because these governments assumed the role of 'enabler' and 'provider' while communities are executor of the programmes and the success of the programmes were for both the government and the communities involved. The role and obligations of the government and community were clearly defined right from the onset. The community residents were not just unpaid labourer; they were involved in every stage of the project. Government assumes the role of the facilitator agency rather than manager and acted as a supporter by motivating the community. Also, government provide training, technical assistance finance and security of land tenure which offered an element of permanency. Therefore, the projects are not just a means to the end improvement of infrastructure and housing but a means of securing land title for low-income communities.

Choguill (1996a) further stated that where local community plans, builds and finances an infrastructure project, they should be allowed to own, operate and maintain it so that it becomes a community asset overtime. He cited a UNICEF-sponsored community projects in Tegucigalpa, Honduras, which was designed to extend water systems to peripheral low income neighbourhoods. A decentralised billing system was adopted with the local community in charge of the financial management, including revenue collection. The community became the water retailer while the government agency played the role of the wholesaler of water. This minimised government inputs and ensured full cost recovery; local resident's involvement ensures that necessary payment was made for the use of the infrastructure and no freeloaders used the system for which they worked so hard. It is important to stress the need for the payment for infrastructure services as this is an important way of ensuring revenue generation for infrastructure provision. The success of the programmes was attributed to the change of role and attitudes of most governmental authorities involved in the projects. Government ceased to be the provider and controller of infrastructure and became advisor and helper to the local community.

Choguill (1996a) however regretted the lack of record of many local community participation programmes because even though they existed, but are not recorded or described in the literature. This is a predominant problem because they are not available for comparison or assessment and it is indeed a pity as, judging from the Choguill (Ibid) study on programmes in Honduras, Sri Lanka and the Philippines. The governments in these case studies changed their role and approach to housing and infrastructure development which resulted in successful outcomes. It does show that some government have good ideas on ways to assist local communities in meeting their needs. There is need for adequate documentation of the successes and failures of participatory initiatives which will enrich the pool of literature on community participation and also provide a measure of assessment and comparison. The result could sometimes be unsuccessful but documentation will serve as a guide to others who may want to replicate the project. Also most successful development programmes are usually as a result of change in the approach and sometimes a change of the government ideology. In order to understand the importance and contributions of community participation to infrastructure development it is essential to discuss the different approaches to community participation.

3.5 Approaches to Community Participation

There have been various approaches to participation over the years. They have been central to development process and have evolved around different schools of thought, political settings and institutional agendas. For many years' focus has been on participatory rural appraisal (PRA) which was treated by many authors and researchers as the definitive form of participation thereby overlooking previous and alternatives approaches. However (Hickey and Mohan, 2004) traced an extensive genealogy of participation and approaches adopted in development thinking and practice as shown in Table 3.3.

Table 3. 3: Participation in Development Theory and Practice: A Selective History

Era	Approach	Institutional and Intellectual Influences	Development Theory: Approach to Imminent Processes and Imminent Interventions	Approach to Citizenships	Locus/Level of Engagement
1940s – 1950s	Community development (Colonial)	United Kingdom Colonial office 1944 Reports on Mass education in Africa	• Reproduce stable rural communities to counteract processes of urbanisation and sociological change, including radical nationalist and leftist movements • Development requires participation and self-reliance; cost-sharing; animation rurale; adult literacy and extension education; institution building, leadership training; development projects	Participation as an obligation of citizen formed in homogenous communities	Community
1960s - 1970s	Community development (post-colonial)	Post-colonial government (social welfare or specialised departments)	• Development of state hegemony' moral economy of state penetration health, education.		
1960s	Political participation	North American political science	• Political development dimensions of modernization theory. • Participation as securing stability, legitimacy for new states and strengthening the political system. • Voters education, support for political parties	Participation (e.g. voting, campaigning, political party membership) as aright and as obligation of citizenship	Political system and constituent parts; citizens
1960s – 1970s	Emancipatory participation (EP) Liberation theology (LT)	Radical 'southern' researchers/educationalist, Freire, FalBorda, Rahman. 2nd Vatican Council, Latin American catholic priest Gutierrez, Sobrino	• Analyse and confront structure of oppression' within existing forms of economic development, state formation, political rule and social differentiation. • Participatory action research, conscientization, popular education, support for popular organisation. • Form base Christian communities, training for transformation, popular education	Participation as a right of citizenship; participatory citizenship as a means of challenging subordination and marginalisation	Economic and civic spheres; communities; citizens
1970s – 1990s	Alternative development	Dag Hammarskjold conference 1974. Development Dialogue, IFAD Dossier. Nerfin, Friedmann	• Critique of 'mainstream' development as exclusionary, impoverishing and homogenizing. • Proposal of alternatives based around territorialism, cultural pluralism and sustainability. • Popular education; strengthen social movements and self-help groups	Participation as a right of citizenship; citizenship as a key objective of alternative development, to be realised in multi-level political communities	Initial focused on communities and civic society, latterly the state through 'inclusive governance'
1980s – present	Populist/ participation in development	Development professionals, NGOs (e.g. MYRADA, IIED) world Bank Participation Learning Group, UN Agencies, Chambers	• Little direct engagement; implicit critique of modernization. • Failure of top-down projects and planning; participation required to empower people, capture indigenous people's knowledge, ensure sustainability and efficiency of intervention. • Participatory: rural/urban appraisal, learning and action, monitoring and evaluation; NGDO projects	Focus on participation in projects rather than in a broader political community	Development professionals and agencies; local participants.

Mid – 1990s – present	Social capital	World Bank Social Capital and Civil Society Working Group. Putnam, Bourdieu, Narayan	• Social capital promoted as the basis for economic growth. • Local institution building, support participation in networks and associations	Participation as a right and obligation of citizenship	Civic association
Late 1990s – present	Participatory governance and citizenship participation	Participatory Research and Action (Delhi), Institute for Development Studies, Brighton (Participation group)	• Development requires liberal or social democracy with a responsive state and strong civil society. Some focus on social justice. • Convergence of 'social' and 'political' participation, scaling-up of participatory methods, state – civic partnership, decentralization, participatory budgeting, citizens' hearings, participatory poverty assessments, PRSP consultations	Participation as primarily a right of citizenship	Citizens, civil society, state agencies and institutions.

Source: Adapted from Hickey and Mohan (2004, pp. 6-8).

Hickey and Mohan (2004) listed the genealogy of participation in development theory as shown in Table 3.3. Some of the approaches have petered out while others continue but the success of each approach depends on the politics and economy of the government in charge. Table 3.3 further revealed that participation is not a new concept neither is it free of political influence. Hickey and Mohan (Ibid.) argued that contemporary development studies often focus on the impending rather than the essential processes of development. This is due to the urgency of procuring immediate solution to development impoverishments thereby neglecting the overall effect on policies. This was described by Kapoor (2002)) as both 'inductive and empiricist' rather than 'theoretical *or* metaphysical'.

Hickey and Mohan (2004) summarised the approaches to participation into four categories such as *"the locus and level of engagement; ideological/political project; conception of citizenship and links to development theory*". The locus and level of engagement determines the approach adopted and who is involved, it also determines if the participation will be at macro or micro level, and the level of engagement and the purpose of the participation such as coercion, control, empowerment or transformation. A clear purpose of participation determines value of the project, the level of participation and the success of the project. Fraser (2005), however suggested four key approaches to community participation which they considered as contemporary approaches in a modernised society. They are further discussed below:

3.5.1 Radical Communitarians and Transformative Approaches

Radical communitarian considered communities as a place of proffering solutions to common problems and issues affecting ordinary people. They regarded communities as a place of identification and refuge from oppression and competition(Mullaly, 2002; Fraser, 2005). Radical/activist advocates and prioritize activities that seek to radically transform the socioeconomic order and progressive empowerment. This a bottom-up participatory approach based on democratic and consensus oriented decisions. It is mostly practiced by those oppressed or alienated from participating in issues affecting their standard of living or quality of life. Such issues include inadequate and poor maintenance of infrastructure developments, poverty and deprivations.

Due to their radical view they are often described or perceived as dangerous and unrealistic as their approach involves demonstration, boycotts, street protest, strikes and order forms of activism. It also uses confrontations and direct actions to legislative change. They make use of educational and awareness forums, groups meetings, programmes or campaigns to promotes acceptable policies or practices. This could be electronically or face to face depending on age of participants and preference. While younger members may prefer the use of internet, the older members are often disposed to face to face method of process of arriving at decisions. The proponent of this approach considered power in a domineering sense and often classified groups, communities or individuals into different social classes in order to gain attention or buttress their points. Conflicts are regularly resolved through discussion and negotiation. (Lee, 1986; Bishop, 2002; Fraser, 2005).

Fraser (2005) noted that this approach is unpopular with most government, it is considered as an ambitious and excessively radical perspective of community participation. Which makes it difficult to implement most especially considering the profound changes required and the partial roles granted to bureaucrats and planning professionals who are also predisposed to electoral politics. The approach alienates many powerful and important segments of society. It is also not attractive to many ‘ordinary’ people who preferred privacy and would not want to link their local community activity to global politics. They therefore regarded this approach as an unsuitable alternative to global capitalism. Despite its criticism this approach to community participation is gradually becoming a global phenomenon as seen by the current trends of activities going on in the Middle East nations.

3.5.2 Technical-Functionalist Communitarians and Managerialism Approaches

This approach to community participation is based on the concept of pluralism and it involves 'standardized' decision-making processes, re-organising, re-structuring and re-aligning while maintaining existing social order. It is a form of participation usually practiced by the elites and those of high social status within the society (Mullaly, 1997; Verdonschot *et al.*, 2009). It is also a top-down approach to public interest and an alternative to consultation with stakeholders. It is often used by political office holder to approve the expert's opinions although this depends largely on their fairness and impartiality (Ife, 2002; Mullaly, 2002). Participants are privately sought out from established community groups and in most cases are not acknowledged. They employ public forum and enquiries only approved by politicians and bureaucrats. The successes being reported in the media while failures remained undisclosed. The advantages of this approach depends on the precise and harmonized mode of operation although it is considered incapable of ensuring the incorporation of socially and environmentally sustainable practices. Also, due to its effectiveness in conflict resolution, this approach is frequently used by local councils and regional governments, big community organizations and established charitable trusts (Fraser, 2005).

3.5.3 Progressive Communitarians and Empowerment Approaches

Progressive communitarians address communal problems through collective decisions. They emphasis incremental reforms rather than structural change. They formulate policies and plan programmes which addresses social needs, welfare and social inequality informed by a wide mix of ideas based on post-modernism, post-colonialism, liberal humanism and eco-feminism (Pettus, 1997; Kenny, 1999; Washington, 2000; Bishop, 2002; Ife, 2002; Fraser, 2005). Progressive communitarians are different from nonconformist alliances, they believe power should be relative cutting across all groups and that the ideal role for government is to facilitate social and environmental sustainability through a mix of re-distributive and procedural forms of justice (Young, 1990; Young, 1997; Fraser, 2005).

Progressive communitarian makes use of empowerment approach and dispute resolution. Examples of these groups are women movements, civil right groups, trade union movement, local environmental groups etc. Empowered communities are

allowed to operate with some degree of freedom, and are involved in the policy and decision making process. This approach makes use of different types of consultation such as electronic, round-table debates and research to generate and implement plans in order to create a sense of belonging (Henriks, 2002a; Weil, 1996). This approach is criticised for its assumption that every community member will be involved. It relies on the willingness of members of established community. However due to inability to ensure the participation of non-professionals and lack of trust by the ethnic minorities, the young, unemployed or public welfare dependent it may result in misrepresentation (Hollick, 1995; Ife, 2002; Mullaly, 2002; Fraser, 2005).

Also this approach is considered complex and risky as result of unconventional alliance with other groups and the possibility of a particular group dominating as a result of diverged plan or interest. Even though it does not really provide a solution to excessive social disadvantage; however, it does maintain a focus on justice and is open to bureaucrats with progressive view. It encourages the restrained use of power or political influence while dealing with irregularities and contradictions in policies (Chamala, 1995; Fraser, 2005).

3.5.4 Anti-communitarians and economic conservative approaches

The anti-communitarians approach to community participation is based on liberalism and economic conservatism. This approach sees community work as volunteering exercise while the decision process is top – down with a single leader in charge of all decisions and activities (Young, 1997). Community participation is accepted just to avoid opposition; maximize profit; secure government appointment or sponsorship and lastly achieve wide publicity and good human relations (Ife, 2002). This type of community participation is usually brief, just to achieve a purpose and the focus is often streamlined towards the goals to be achieved such as personal or economic interest. This form of participation is common among politicians seeking political post or gratification, who as soon as they achieve their aim see no reason to continue with the embarked projects

It is important to note that Fraser's approaches were conceptualised in a developed country, and may not all be applicable in developing countries most especially countries that lack adequate structure or democratic process. However recent uprisings in the middle-east countries popularly referred to as 'The Arab Spring' show

the level of advancement in the approach to community enforcing the representation of their opinion and view. However, the difference is the outcome which may be negative or positive and the time frame of achieving the outcome which largely depends on structure of governance. Some of Fraser's approach cannot be practised in some developing countries as it may attract great consequences, this was buttressed by Choguill (1996a) that the political atmosphere of most developing countries is quite different to those in the developed countries. This has great influence on the approaches to community participation, no wonder most local resident will rather resort to self-management which is a passive way of communities meeting their needs as a result of neglect by their government. However, where there is government support, community participation usually leads to empowerment, partnership and conciliation. But then does community participation guarantee adequacy and successful development of projects? This study hopes to assess the contribution of community participation which is further discussed in the next section

3.6 Implementing Community Participation: Collective Action and Community Driven Development Projects.

Collective action involves the participation of every stakeholder in a common goal and it allows the residents of a deprived community participate in socio-economic development of their community. It originates from the theory of Paulo Freire, an educationist who believed that through share-willpower and self-assurance, the socio economic differences and gap between the rich and poor in a community can be bridged through access to the education by the low socio economic class in order to achieve collective goals. The following have been identified by various scholars as factors that influence and advance collective action, they are group size; social and economic heterogeneity, the existence of non-linear relations and the mediating role played by institutions (Narayan, 1995; Agrawal and Gibson, 1999; Campbell and Marshall, 2000; Platteau, 2004; Poteete and Ostrom, 2004).

Community driven development (CDD) on the other hand is a way of initiating collective action, it is a process whereby local residents or community groups control the resources and decisions of their developments in their local communities. There are two common approaches to community driven development in the literature namely; asset-based and need-based. (Mathie and Cunningham, G; 2003). In both methods, local community plan, implement, monitor and managed projects which are expected

to lead to the empowerment of participants and also improve security of the poor. They often work in partnership with demand-responsive support organisations and service providers including elected local governments, the private sector, non-governmental organisations and central government agencies. CDD enhances sustainability and improves efficiency of infrastructure services (Infrastructure studies of community-organised irrigation systems in Asia). CDD encourages participants of all stakeholder inclusive of the interests of poor people and vulnerable groups. It also builds social capital (access to resources and opportunities) and local institutions (self-help group) (Raphael *et al.*, 1999; Kulig, 2000; Hennessey-Lavery *et al.*, 2005).

Collective action and CDD are two similar terms and are both bottom-up approach to infrastructure development. They involve creating desired changes through collaboration but whether they increase community capacity is another question. Collective action is also known as community self-help and is usually a spontaneous approach adopted by communities to meet urgent needs while Community driven developments is a gradual process of a paradigm approach development from economic development programmes to projects based development resulting in the growth of `community participation' as an alternative approach. The move towards a project-based approach acknowledges that local communities have the local knowledge, experience, skills and networks to embark on projects that meets local needs but then it generated debates on the objectives of community participation which includes the types, purposes; who should participate and at what levels of participation. Despite the extensive debates, most publications are detailed case studies of aspects of community participation in the implementation of particular projects in a particular geographical setting which are not situated within the wider economic and political ideology and social environment (Moser 1989).

Most countries have different ideologies of governance which inevitably reflect in the approaches adopted for the provision of infrastructure. This leaves a wide and fundamental gap between theory and practice. Recently, approach to infrastructure development in many sub-Saharan countries is gradually becoming a 2-way process; there is the expert-led and top-down approach to development projects and the community –led and bottom-up approach. The top-down approach is based on the traditional role of government as the main provider of infrastructure development while most community-led bottom-up approach are forced by outside agencies who provide

financial aid for the developments of infrastructure developments in the sub-Saharan countries. Can the community participation enforced by outside agencies e.g. government be regarded as true community participation? Also what makes a resident qualify to participate?

Sampson (1988) opines that all community residents should be allowed to participate in the development of their communities irrespective of their length of stay or mobility. However, he considered the length of residence as the major factor influencing residents' attitudes and activities within their community. This is in line with Kasarda and Janowitz (1994) argument that assimilation of new resident members into the social fabric of local communities is a time-based process that helps strengthened community sentiments once established. It takes time for new resident to settle and be grafted into a community and that residential mobility is a strong barrier to the development of extensive kingship bonds, friendship and local associational ties. Community Organisations or Associations are avenues of establishing such long lasting bonds within communities

Sampson et.al (2005) also believe that the concept of collective efficacy has gradually moved away from a narrow focus on private ties and personal membership. Rather it emphasises the abilities of residents or organisations to solve problems which demands the collective involvement of residents irrespective of their length of stay in their neighbourhood. Tritter and McCallum, (2006) also argued that user engagement and empowerment are complex phenomena which depends on the desired degree of participation of individuals in decision-making processes irrespective of the fact that it is a joint decision involving others. However, Olson (1965) pointed out a misconception in traditional group theories, which assumed that if a group had reasons or incentives to accomplish joint interests, rational individuals in that group will choose to support the collective endeavour. He considered this unlikely and logically erroneous in most cases especially with large groups of participant.

Chen and Webster (2005) went further to affirm that it is always difficult to maintain and sustain the interest of large groups compared with smaller groups and any success achieved often comes at a higher organisation cost before collective action can take place. They and a number of scholars theorized that it is rare and unlikely that groups of individuals will behave and act in a co-ordinated and co-operative manner (Chen

and Webster, 2005; Kenna and Stevenson, 2010; Chen and Webster, 2013). It is generally believed that unless members of a larger group are forced or coerced they often seek to maximize their personal welfare rather than advance their common objectives. Also each member prefer that others pay the entire cost for the collective action since there is no incentive to share the cost, this is known as *free rider problem*, however Dixit and Olson (2000, p. 313) proposed that the Coase theorem is a way of circumventing the powers of the free riders "*Each person will be asked to pay his share if and only if all others pay their shares,' or 'If anyone is absent from the meeting, the good will not be provided at all"* They are of the opinion that it will curb the activities of free rider and they will know that their decision his absence will be detriment to the project.

Secondly, some of the benefits of group-oriented action are by nature, non-excludable and indivisible making it difficult to restrict access e.g. road projects. They are usually classified as local public goods and each individual may be better off reaping the benefits without incurring the costs. The question therefore is what motivates an individual to participate and bear the cost of the collective action? Community driven development and community self-help provides the opportunity to possible overcome the problem of 'free rider' associated with public infrastructure, but it is equally vulnerable to influences or capture by the elite members of the society because participants often have unequal social positions and access to economic resources, different levels of political influence; knowledge and procedures (Abrahams, 1996; Fung *et al.*, 2003; Dasgupta and Beard, 2007).

There are different types of elites at the community level, such as social, political and economic elites, they all have various influences, power and affiliation which may include political party, religious, kinship, lineage, employment, educational attainment, land holdings or tenure in the community. This is similar to the issue addressed by Arnstein (1969) and the need for the poor the society to have equal right as the elite in decision making process. The elites have the potentials and capability to advance their interest and by so doing exclude other participants (Fung *et al.*, 2003). Therefore, it is important to motivate the 'less privileged' to participate so as to reduce the domination of the elite. Such overbearing influence can also be reduced by supervised and enforced rules of conduct. Accountability can also be achieved internally and externally

through elections, conflict resolution agencies and participatory budgeting (Olowu, 2003b; Olowu, 2003a)

It is easy to overcome the problem of elite capture within a small group however it is more difficult with larger groups. Some scholars challenged such earlier theorizations of collective action (Bromley and Feeny, 1992; Ostrom, 2000; Platteau, 2004). Ostrom (1990) work supports the conceptualization of the free rider problem and other difficulties associated with collective action and went further to present a participatory approach as an approach to developments where local communities can influence an organisation by creating their own agreements and systems of management. Through a series of case studies of small-scale common pool resources (CPRs), Ostrom (2000) examined how a 'group of principals in a co-dependent situation organized and governed themselves to achieve ongoing joint benefits when faced with the temptations to evade their responsibility, or free-ride. I adopted participatory development approach for the study in order to examine impact of community participation on infrastructure development.

3.7 Participatory Development Approach

This section presents a theoretical basis with respect to local people participation in the infrastructure development process within their geographical location. Local people herein refers to projects beneficiaries or recipients including community organisations; community leaders and residents. Participatory development is an approach where community's members influence the development of their community due to the capital intensive nature of infrastructure development which is grossly beyond the efforts of an individual. Participatory development approach refers to the involvement of all the stakeholders which includes government and local people in development processes. It is a shift from the top-down approach to bottom-up approach where decisions about development projects originate from the community and likewise the executions of the development projects. Participatory development approach gives the local people the voice and the power to articulate their needs. This is different from the traditional development approach 'top-down' where all the decisions on development is taken solely by the government. The beneficiaries or local people are thus regarded as *'active subjects'* rather than '*passive objects'* of their own development.

The concept of participatory development approach is based on power shift, rather than local people or beneficiaries being passive, they control the development process based on their own needs and terms. They are no longer at the receiving end of the development process designed by outsiders, rather their opinion and viewpoint are considered right from the onset of the development process. Participatory approach often leads to local ownership, and the acknowledgement of the logical capabilities of 'beneficiaries or local people'. It lay emphasis on participation with a clear definition of its meaning in practice and in reality. The proponents of participatory approach state that the local people can solve their problem given the appropriate resources (Mohan and Stokke, 2000). Many non-governmental organisations, aid donors and outsider developers such as World Bank, UNDP etc. are in support of the participatory approach. They provide assistance, expertise and resources to the beneficiaries in other to achieve their development goals. They help countries to plan and implement strategies and solutions through the participatory process of the governments, civil societies and development partners. Participatory developments also help in identifying the social, political and cultural conditions within a community which can influences participation and how to make it work better ((Whittington *et al.*, 1998; Aparicio and Garrison, 1999);

There are different forms of participatory development research such as Participatory Rural Appraisals (PRA) (Chambers, 1994; Mohan & Stokke, 2000), Participatory Appraisal of Needs and the Development of Action (PANDA) (White & Taket, 1997); Participatory Poverty Assessments (PPA) (Greenwood, Whyte, & Harkavy, 1993; Holland, 1998) and so forth. They are all based on different outcomes and goals however they basically employ the same methods which is the use of dialogue and participatory research to enhance people's awareness, confidence and also to empower their action. Participation Development Models are also regarded as 'inclusive' approach where all parties including the marginalised, disadvantaged or vulnerable groups participate. Chambers (1994) believe that the marginalised social groups such as the vulnerable, poor, weak and exploited should be considered first in any development decisions and also that communication should accommodate all the different levels of literacy which is Paul Freire's argument in his community action model.

The success of participatory approach is greatly affected by the ambiguity of the word 'participation' and it often means different things to different people and can also be applied in any situation. Over the past few years' participatory approach has become popular and has also been criticised by many authors as having a number of problems with both its epistemology and ontology. Participatory development often regards 'the local' as a harmonious community and it tends to promote consensual belief, where the poor and vulnerable are prioritized as more important than the elites of the community. The success of participatory approach is largely determined by collaboration, consensus, communication and compromise. It usually operates through effective kingship and ethnic group, which is believed to undermine 'diversity', one of the intensions of participatory approach.

However, this criticism has been addressed with conscious efforts made to divulge heterogeneity and difference through needs assessment. This ensures that local inputs relevant to the local situations are selected rather than top-down development plan proposed by experts or government officials (Norton *et al.*, 1994; Pretty, 1995.; Goebel, 1998; Freebairn and King, 2003; Carruthers *et al.*, 2005; Stringer *et al.*, 2006). Local engagement may help build community capacity to address future problems, and this may be more significant than the results of the actual development projects. For example, in community-based environmental management work in Bangkok, the act of inventorying land and identifying problems played a key educational role in the community (Fraser, 2002). The question therefore is if this approach has been effectively applied to infrastructure developments especially in the developing countries. Also what is the evidence that participatory approach will actually lead to positive development?

3.7.1 Participatory Development Approach and Infrastructure Development

Since the 1980s, the participatory development approach has been used extensively in the field of development. It has become a prerequisite for any development projects aids receive from international organisations especially in the field of service delivery systems instead of popular centralized bureaucracy of infrastructure provision. This shifted the focus of development process from hierarchy and control to participation and empowerment a result of the affirmation of community participation as a useful strategy.

The right-wing school of thought considered participatory approach as a means to implement a development project more efficiently while the left-wing school of thought sees it as a tool for empowering the vulnerable. Thus, participatory development approach is considered useful in the effective implementation of infrastructure development projects and a means to an end. It is also perceived as making infrastructure provision more efficient and accountable (Brett, 2003). Table 3.4 shows the dimensions of participatory development. The success of any development programmes depends on types and levels of participation, who participates and method employed.

Table 3. 4: Dimensions of Participatory Development Approach

Participatory Development Approach	**Measures**
Types and levels of participation	• participation in decision making • participation in implementation • participation in benefits • participation in management • participation in evaluation
Who participates?	• local residents • CBO's, NGO's, CDA's • community leaders • government personnel • foreign agencies (aid donors)
How is participation occurring?	• objectives of participation • method of participation • extent of participation • effect of participation

Source: Adapted and Modified from Cohen and Uphoff (1980).

Participatory development approach in infrastructure developments ranges from local people involvement in government-led development programmes to community-based development initiatives aimed at increase in the supply of infrastructure provision (Narayan, 1995; Slaymaker *et al.*, 2005; Marks *et al.*, 2014; Rivas *et al.*, 2014; Njambi, 2015). The success of this model depends largely on participants' capacity and local

collective action. Rivas (2014) attributed the improvement of individuals' access to water in a low-income, indigenous community Oaxaca in Mexico to characteristic of the community and its history of participatory development approach through collective action. Community efforts was employed to clean the water system; residents help to clean the water pipes every two years to rid them of the muds. Also the universal connections of water services within the town was achieved through community collective action which remained active and was extended to others such as the construction of community assembly room where the town holds their community meetings and also the roofing of basketball court in the centre of the town (Rivas, 2014).

Unfortunately, however good it may seem, participatory development could be challenging as it is affected by various factors ranging from misconception of participation to hijacking of programmes by social elite. It is impossible to rule out the influence of the social elite, individual choices and values which may affect their level of participation even if project is community driven. There is the need for communicative action theory and collaborative governance theory to enhance the application of participatory development model. The debate for collaborative governance theory or collaborative approach as it will be referred to in this thesis emerged due to awareness of the power of the elites, the high cost of construction and chiefly because of the failures of lower level implementation of projects and decisions particularly the community level (Ansell and Gash, 2008). Furthermore, collaboration became popular as a result of increase in knowledge and institutional capacity which is a major advantage of participatory development approach. As participant's knowledge increases, relationship among them either become complex or interdependent, whichever it may be, it is observed that the demand for collaboration also increases and so also does their communicative approach otherwise referred to by many as 'communicative action theory'.

The purpose of this research is not to criticise or debate both theories mentioned above but rather to dwell on the benefit they bring to participatory development model. This is in recognition that some infrastructure development transcends the purview of the local community and therefore they will need to collaborate with other stakeholders which require communicative skill. Moreover, infrastructure development requires a great deal of planning which is the determinant of its success or failure. Many

academics has argued that the planning process can be debated and that it can improve the building of consensus among stakeholders which is one of the attributes of participatory development (Reed, 2008). Furthermore, other scholars also identified that community action in planning process is a means of subjecting public planning policies to public scrutiny in order to give them legitimacy (Healey, 1998; Reed, 2008). Likewise Albrecht and Travaglione (2003) stated that communicative action can enhance social relations based on mutuality and equality.

Ansell and Gash (2008, p. 544) *defined "collaborative theory as A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets".* While communication involves the exchange of information, which could be rational, argumentative, or constructive (Risse, 2000), all these attributes are needed to enhance participatory development approach. This is because Participatory development brings together various stakeholders together to debates, plan, design and implement project some which may be complex and also have great impact on peoples live. Therefore, in the context of infrastructure development the first question to answer is: 'what' type of participation is worth consideration? There is difference between spontaneous, voluntary and coercive participation. Although in practice, it may be difficult to make a clear distinction in the light of personal or political motivation. This is particularly so when material incentives are employed to encourage local resident co-operation and especially in low-income communities where residents lack the finances to ensure their needs are met. Mansbridge *et al.* (2010) argues that decision making process is a significant way of exercising power and should be made effectively representative so that groups previously excluded or neglected from the decision process will be included. The question therefore is willingness to participate? There is need to define participants as this will ensure that certain groups such as the poor and women are included especially those who are mostly affected by the development project's actions and policies.

3.7.2 Community Participatory Organisations

Participatory organisations are made up of groups and associations which are part of the primary stakeholders and may have linkages to resources and technical expertise from secondary stakeholders. According to the World Bank (1994), the primary

stakeholders are projects beneficiaries including the marginalised and poor who ordinarily lack the means and power to get involved or influence the development process. Participatory organisations often evolve as result of common goal or interest and close proximity which foster relationships and are sometimes fraternal in nature (Abegunde, 2009). The three terms commonly used in the literature are NGOs, CBOs and CDAs often interchangeably; NGO's is the most widely used to cover all organization in which the other two terms can be subsumed depending on their scale of operation (USAID, 1984). Most participatory organisations are formed in response to the failures of government to meet the pressing needs of the members of the organisation such as potable water, motorable roads, market, schools etc.

The focus of this study is on community based organisation (CBO), they are various intermediary groups or organisations through which communities are involved in the development process within their local communities or neighbourhood. These organizations are sometimes structured according to age, religion, gender or socio-cultural groups but are often coordinated by community heads or leaders and appointed officials. Local communities are able to present a common front and goal through CBOs and also channel their financial, intellectual, technical, interest and supports for collective development projects. In every community, there exist webs of relationships and interactions among residents living in the same area or neighbourhoods. Community based organizations are regarded as localized or neighbourhood institutions whose influence and membership is placed on equal level. The organisations operate within neighbourhoods or localities and are often set up by collective efforts of indigenous people of homogenous or heterogeneous attributes. They could be living or working within the same environment however they usually have common goals ((Adejumobi, 1991; Abegunde, 2011)

CBO's are voluntary and non-profit organizations where membership is based on residency in the same communities or geographical location. Membership of these organisations are dependent on individual choice; although it may be compulsory in some certain trades or professions such as the market women unions, landlord association. Abegunde (2009) study on "the role of community based organisations in economic development in Nigeria" highlighted CBOs as "vehicles towards economic development in lagging regions". He is of opinion that CBOs provide forum for residents to collectively contribute towards the growth and development of their communities.

CBOs are funded through individual, donations, levies or grants from international agencies or governments (Agbola, 1994). NGOs on the other hand may be indigenous or international, such as donor agencies, coalitions, church organizations and others organisations operating at national or sub-national levels. Most NGOs like the CBOs are organizations formed to solve the most pressing problems facing communities and according to Aina (1990) the most acceptable and recognized of these urban social movements are those found in slum and squatter settlements and areas with deficient infrastructure deficient whose residents, through their common problems find a basis for common action.

The success of participatory organisations depends on participation of involvement in the decision process and the available resources to implement their programmes e.g. finance and technical expertise. However, where projects beneficiaries are unwilling to contribute or are excluded from the decision-making processes, it will be more difficult to achieve effective participation. Difficulties are often encountered in getting people to `buy in' on projects that did not originate from them thereby making the process difficult but not impossible. In a truly participatory approach, one might expect that every participant or all those affected might be involved in the development process. But then in reality do stakeholders have the choice to participate or not?

3.7.3 Participation: Choice or Necessity?

Considering the fact that many Sub-Saharan governments, Nigerian inclusive, are struggling to meet the supply of infrastructure development, many service users are increasingly involved in the provision of basic infrastructure needs. They are left with no choice than to pay for the provision services just to have access. Menzel and Wiek (2009) in a study conducted in the United Kingdom aimed at challenging the authenticity of willingness to pay as an indicator of choice behaviour of service users. They are of the opinion that most people have a ‘deontological value’ orientation that influences their decision. They further identified three classifications of value theory in the literature: moral or ethical value theories; consequential value and deontological value (Davezies and Prud’Homme, 1994). While moral value theory is based on what is considered as right or wrong judgemental, ethical values theory is considered as requirement and not an option (Bhattacharya and Sen, 2003). Value theories however relates to our action and motive, they are evaluative and often deals with the values or decision taking as a result of our action shown in Figure 3.2

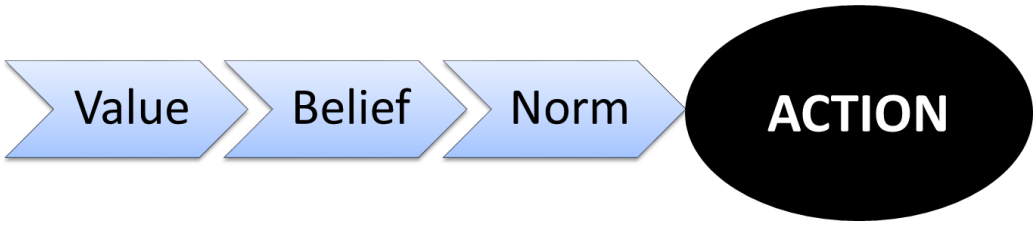

Figure 3. 2: Behaviour Model
Source: Stern *et al.* (1999) adapted from Nyong (2012, p. 71).

The behaviour model explained choice of action taken by many participants which are determined by their value, beliefs and norms (Stern *et al.*, 1999). Value, norms and beliefs are imbedded in culture and therefore it is not strange to find people participating in communal development because of their belief, culture, and needs. Hofstede (1991) went further to identify five dimension of culture as basis for people behaviour and choice. They are power-distance; collectivism/ individualism; uncertainty/avoidance; time perspective; femininity/ masculinity. The culture dimension explains why some resident will rather choose to participate or be a free rider, enjoying the benefits of community projects they did not contribute to. It explains the residents' attitude, willingness or reluctance. Some community members may participate or rejects some certain projects if such projects are seen as contravening or in line with their belief. This study also identifies the driving force behind the choices that local participants make in order to ascertain whether they are their genuine choices or the participants have been coerced or compelled.

3.8 Reflection: Implication for Research

The literature reviewed showed the importance of infrastructure and that the provision of infrastructure can no longer be left to the government alone even though they still assume the traditional role of provider or contemporary role of regulators. Communities are forced to seek alternative means of meeting the shortfall from public provision. But how much can the communities provide within the scarce resources at their disposal without outside? Adequacy of infrastructure is beyond availability rather how accessible are the infrastructure to the local community? Also the quality of an infrastructure often determines its effectiveness and impact on the well-being of users. In order to improve the adequacy of infrastructure, local communities may require external assistance from government or aid donor. In most cases communities are not

able to afford the total cost of infrastructure development or the technical expertise they therefore need assistance from governments and other stakeholders. There may be need for a change of role from provider and controller to facilitator and advisor. Government should be able to facilitate the communities to contribute to the infrastructure development. This does, however, require a change of approach by institutional framework and attitude of key government agencies and authorities.

Community participation as an approach to infrastructure development is a change from the traditional and conventional approach. It divulges the responsibility of infrastructure development to the community with respect to the planning, funding, development, operation and maintenance. This is beyond traditional approach where infrastructure development is centrally funded, controlled and managed, conventional approach of decentralisation or privatisation where the private sector funds and sometimes controls and manages the infrastructure developments. However, the greater part of these responsibilities depend on the ability and knowledge of local communities with or without the help of government and donor agencies. One of the key objectives of participation is to incorporate local knowledge and preferences into the decision-making processes of governments, private sector providers, and donor agencies. When potential beneficiaries are able to make key decisions, participation becomes a means to an end with outcome being the enabling of local communities exercising their power, and choice which is expected to lead to better-designed development projects, more effective service delivery, and improvements of benefits.

Also the benefits of community participation in development process is dual, there is the benefit to the projects recipient and the project itself. Community participation influences participants' empowerment either directly or indirectly, it provides various opportunities to formulate, initiate and execute strategies which will invariably improve their situation. Knowledge is acquired in the process which is also useful for the maintenance of existing projects and the development of future projects. (Mitlin and Thompson, 1995a; Imperato and Ruster, 1999; Mitlin, 2008). It also helps develop participant's confidence and control over issues directly or indirectly affecting their lives. Community participation helps in creating enabling environment of collective responsibility; development of shared visions and mutual trust. It helps participant develop a sense of ownership of a project, which is an important ingredient for commitment to change; projects maintenance and sustainability (Oakley, 1991;

Theron, 2005). Community involvement ensures the adoption of an approach that suits local circumstances either culturally, religious or politically. However good community participation might seem, it also has its failure.

Community participation does not always yield maximum outcomes of projects especially due to inadequate information, ignorance by participants, domination by certain individuals or agencies, inappropriate timing for consultation, lack of clear guidelines and lack of accountability (Emmett, 2000). The World Bank (2000) reports revealed that the process of voting as a participatory tool for an election may result in the selection of political leader but it does not guarantee the accountability or mean that the elected government will be responsive to the needs of the local citizens. This is typical of participation as a means to an end and it is just a process which may not result in the expected outcome. Participants might not be motivated by working with others due to conflicts and disagreements as a result of power struggles and individual differences. Conflicts and tensions can arise due to ethnic, religious or political differences and different perception of community participation (Oakley and Marsden, 1984).

Furthermore Doe and Khan (2004) are of the opinion that participation and ownership are often equated, that community management works more within small groups and that community cohesion is often expressed in ownership. They identified four characteristics that have bearing on community management, they are population size, household size, age of household heads, and occupation of household heads. These variables were used to analyse the level of participation in a study in Ghana and it revealed that population size has significant effect on level of participation especially in small communities with population between 1000 and 3000 as they were more committed to communal projects than communities with higher population. Also small farming community had fixed days for communal activities while aged members were more active. Similarly, I will also use the same variables to analyse level of participation in the case study in Akure suburban area in order to further authenticate the model and the success of local participation.

The success of community participation depends largely on the ability of community leaders to organize, delegate duties or resolve conflicts. It can lead to project delay where projects involve complex organisation and activities or where proposal does not

meet the need of the participants most especially considering social and cultural factors which includes local traditions, power structures and gender segregation (Midgley *et al.*, 1986; Oakley, 1991; Moser, 2012; Plummer and Taylor, 2013; Rivas, 2014). Furthermore, the capacity of recipient community to participate depends largely on availability of resources, time skill and labour. There is also the issue of the assumption that there is 'a community' which is able to participate in the development programme. Communities are seldom, if ever unified or homogenous, therefore diversities of interest and problems of interrelationship often result in the failure of participation programmes (Emmett, 2000; Parfitt, 2004; McCrea, 2010; Moser, 2012). Figure 3.3 below show the framework for community participation adopted for this research.

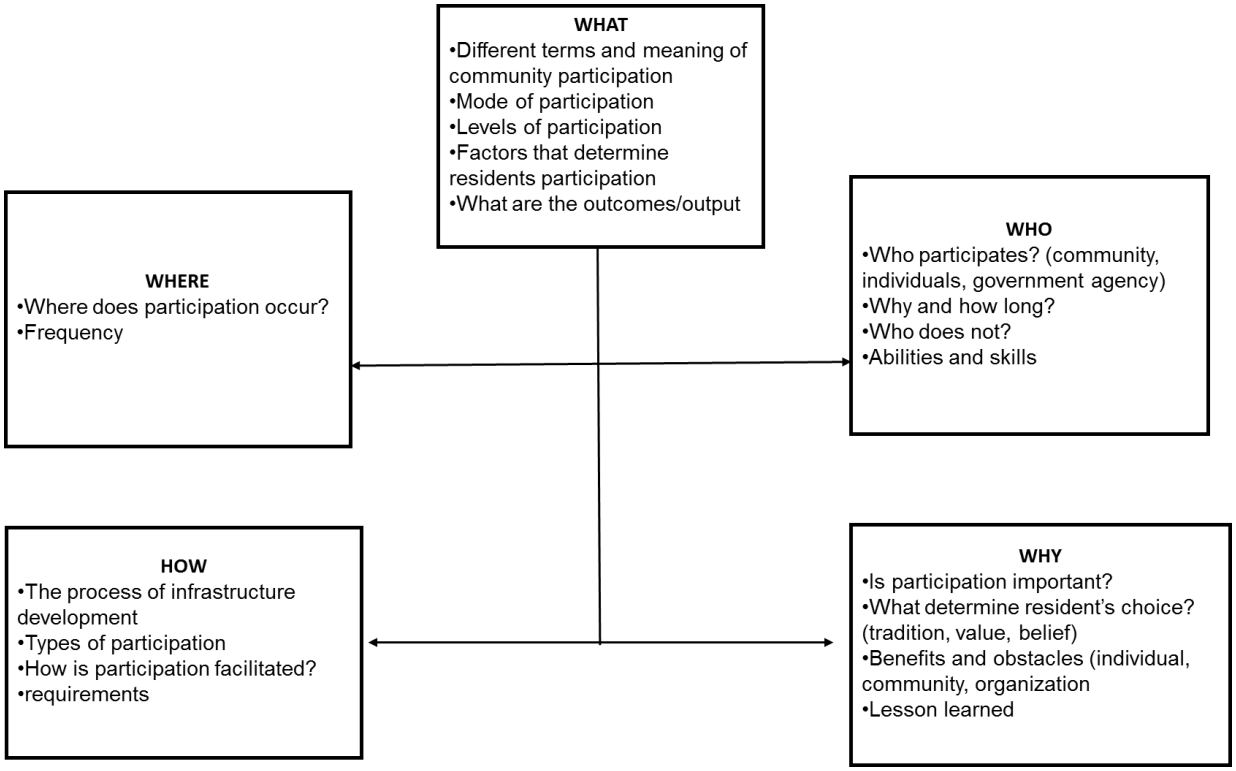

Figure 3. 3: Framework of Community Participation
Source: Adapted and modified Bracht and Tsouros (1990, p. 200)

The framework was used in assessing and analysing community involvement in infrastructure development in order to evaluate the outcomes of community self-help programmes within the selected case study. The framework enabled the researcher to assess whether they achieve the purpose of participation as an end product (improvement of the adequacy of road and water services) or it was just a means to an end which could be self-gratification or achievement of political agenda. Even though government may not be able to meet all the needs of communities, it should be

able to facilitate the community. Therefore, the framework was also used to assess the role of government agencies and provision in order to determine who, where, why and how government initiated participation in order to determine whether the projects were truly bottom-up or forced on the communities. Further examination of the role of government in different contexts would undoubtedly be beneficial. The research hopes to examine the infrastructure development process can be improved to encourage participatory development process and also to study changes in the role of the government from provider to include facilitator which will promote the local community inclusion infrastructure development process.

3.9 Research Gap

The importance of adequate infrastructure development is emphasised in this study while the literature review has shown that the process and approaches of infrastructure development in any country is germane to the adequacy of provision. In Nigeria central public infrastructure provision is the predominant approach to road and water infrastructure provision with government attention focused mostly on the urban and rural areas while there is no clear demarcation of suburban areas which also affects provision of basic amenities. This research examines the process and approaches of infrastructure development while emphasis is on the methods adopted by suburban dwellers in meeting their inadequate provision.

This research therefore contributes to the existing pool of knowledge on infrastructure development process and community participation most especially regarding factors for assessing adequacy of infrastructure development and the adoption of community participation as a progressive step in the improvement of infrastructure development process in the light of dwindling resources. It will also identify the factors that influence local community participation in infrastructure development. The study also hopes to increase the understanding of the importance of people-initiated programmes which will assist policy makers in formulating policy that take cognisance's of local people view.

Furthermore, there are numerous literatures on the successes or failures of community participation programmes initiated by government or non-governmental organisations more than those initiated by the community. There are possibilities that communities may have through local initiatives improved or failed to improve the adequacy of

infrastructure provision but these outcomes are not well documented in the literature. This may be due to the fact that it has not attracted the attention of academics or consultants who are more likely to record these accomplishments than the local people who may not be educated. Therefore, many community participation initiatives have been undertaken quietly and have eluded the glare of academic investigation and evaluation. Also there is the probability that some community self-help projects may have failed, if so there is need to make such public as they could form a significant contribution to the literature on the process of community participation just as much as the successes.

The study will also assist policy makers in identifying problems relating to the institutional framework of infrastructure development for road and water provision in Nigeria in order to introduce more operational arrangements for the planning and implementation of infrastructure development programmes that will be more effective and comprehensive. Lastly there is need for the assessment of the impact of community involvement in the other types of infrastructure, this research only focuses on the process of the development and adequacy of road and water infrastructure.

3.10 Chapter Summary

The literature review revealed a number of issue such as the meaning and notion of community and participation. The models, levels and approaches to community participation were discussed. The next chapter will explain the research techniques adopted including research design, data collection and analysis, survey preparation and methodological issues which emerged during the fieldwork.

Chapter 4. Research Methodology

4.1 Introduction

This chapter gives an insight into the methods employed in carrying out the research; it describes the design of the study, target population, data collection instruments, sampling procedure and the relevant tools for data presentation and analysis. It explains the way the research was carried out so as to give a clearer picture of the data collection process and to provide a firm background for the data analysis.

4.2 Research Design

The framework of any research is underpinned by the questions of what will be done, why, how and when; the ability to provide clear answer depends largely on the approach adopted. The validity and reliability of the study findings depends on the selection of the appropriate research design (Denscombe, 2007). In selecting the research approach, the research problem, the experience of the researcher and type of report often plays an important role. There must be clear identification of the evidence needed to answer the research questions and it must also describe an observable fact (De Vaus, 2001). Research Design address the planning of scientific inquiry, it is the structuring of investigation aimed at identifying variables and their relationships to one another; it serves as a useful guide to the researcher in order to generate data for the study (Asika, 1991).

A researcher might state a knowledge claim by making reasonable assumptions regarding how and what they learn in the course of their research (Creswell and Miller, 2000). Other researchers consider such claims as paradigm, epistemologies and anthologies, philosophical assumptions (Lincoln and Guba, 2003; Crotty, 2003). A research methodology could be experimental, ethnographic, survey, case study etc. They provide specific procedure of inquiry. This research adopts qualitative research over quantitative research because of the need to interpret social action by understanding the meanings and motives on which it is based through qualitative methods as opposed to being grounded in statistical or mathematical logic.

4.2.1 Qualitative Approach

Qualitative research was adopted in the study because it is method of social inquiry which focuses on people interpretation of their experiences and the world they live in

in order to comprehend the social reality of different cultures, groups and individual (Holloway, 1997). Qualitative methods allow the interpretation of social phenomena and also allows the collection of data from a natural source. The qualitative approach allows respondents to express their views in wider perspectives through deduction reasoning rather than subjecting them to rigid answers to closed questions of quantitative methods. Deductive reasoning works from general to the specific while inductive is the direct opposite (Trochim, 2006).

A qualitative approach was adopted because of the need for in-depth study in order to answer the research questions. This requires more interaction with key officials of government agencies and the local community in order to be able to get their perception of community participation, participatory development and their impact on infrastructure development. Also the researcher having lived most of her growing life within these communities coupled with her background training in Estate Management, had the opportunity to observe the process of community participation over time. This generated her interest in the study and the need to understand participants' perception of community participation. The decision to adopt a qualitative study was taken in order to avoid bias and imposing preconceived ideas on the findings. Crotty (2003) rightly pointed out that there exist different forms of interpretation and that there is no valid or true interpretation, therefore there is a need to adopt an approach that will effectively distinguish between the experience and perception of an individual from personal feeling or perspective. Denzin (2009) states that each research method has different ways of interpreting and revealing reality or presenting a phenomenon depending on the scope or angle of observation.

The case study approach was employed because the study is related to a particular setting and also in order to answer the research questions with reference to a particular geographical setting. Yin's definition of a case study approach emphasised an important strength of case studies which is the ability to undertake an investigation into a phenomenon in its context; it allows an in-depth understanding of real life occurrence without necessarily replicating it in a laboratory or experimental setting (Yin, 2003). It enables an in-depth observation of a particular phenomenon; it will also provide a systematic way of looking at events, collecting data and analysing information and reporting result. Case study allows a researcher to gain a deeper understanding of the reasons why events occurred as they did (Flyvbjerg, 2006). This study was focused on

a particular phenomenon within a particular setting; therefore, case study approach was selected based on the conceptual framework, the purpose of this study is to assess the impact of community participation on infrastructure development in Akure, Nigeria.

4.2.2 Selection of the Case Study

Various researches stratified Akure city into three residential zones based on Burgess (1925) Concentric zone theory and population density. They are identified as the core, the peripheral and the suburbs residential settlement pattern (Fashakin, 1985; Olanrewaju, (1990); Okoko,(2002); Ogunmakin, (2005). The Core Area are the inner parts of the city centre which are predominantly made up of old residential structures, commercial and few administrative developments. Some of the developments predate the colonial period in Nigeria (before 1914) e.g. the traditional market and the king's palace. This is a high density area comprising of over 151 persons per hectare with rapid conversion of built up areas as most of the residential properties are old, dilapidated, squalid and poorly ventilated. The core area of Akure city commands highest land value and they include Eruoba, Odo Ikoyi, Igann, Odo-Ijoka, Immagun, Isolo, Erekefa, Erekesan, and Oritagun quarters among others.

The Transition Zone area of Akure city comprises of between 51 to 150 persons per hectare and they are the extensive post- colonial development area characterised by a strong mix of land uses such as residential, commercial and administrative. Also the residential properties within this zone are mixture of old and fairly new ones and there is fair accessibility to the city centre e.g. Hospital Road, Oluwatuyi, Fanibi-Lafe, Oshinle etc. Lastly the Peripheral zone are the suburban area of Akure city comprising of 0 to 50 person per hectare. They comprise of private residential layouts and government residential areas (GRA). Government Residential Areas (GRA) are housing estates and land division allocated by the interested developers/citizens with preference given to civil servants. There are 10 government residential layouts (GRA) in Akure city and most of the GRA's are located in the periphery of the city and have been an important strategy used by government to encourage development in new layout within the peripheral zone (Akinbamijo, 2004). Also, some of the GRAs are site and services scheme where the residential properties were developed by private individuals.

Others GRAs are public housing schemes which were designed by the state government and expected to have reasonable infrastructural facilities such as pipe-borne water, drainage system, refuse disposal system and access road. The private layouts include both formal and informal settlements where plots divisions are sold to private buyer without any provision for infrastructure facilities. They are mostly subdivided portions of lands belonging to local families. The formal private layouts are registered with the Town Planning office, while the informal layouts are not. At the time of data collection there was 1,526 registered private layouts in Akure city with 719 located in the suburban area, 269 in urban and 538 in rural areas. However, in both cases individuals have to provide infrastructures either through self-help, community initiatives, local or state government e.g. Awule area, Ijoka, Obaile, Ondo road.

This research is focused on the sub-urban areas of Akure city. There are 220 communities in Akure city while 92 of them are located in the suburban area. Even though the research could have been carried out in any of the various communities in the city, the sub-urban areas were selected because they are predominantly residential areas with mixtures of both private and government residential layouts and lots of new residential layout. Considering the magnitude of the communities, time frame and available resources, 5 communities were selected based on the following criteria;

1) **Ownership of Layout:** Communities in Akure can be categorised based on ownership of layout into two groups which are government and private. The selection covered these two categories.
2) **Cultural factors:** This factor was considered to ensure selection of some communities that are considered as traditional settlements because they have traditional leaders or chiefs. Also some communities were selected because of their heterogeneous nature i.e. comprising residents from different cultural backgrounds so as to be able to study the effect of cultural factors on the study
3) **Locational factor:** Geographical location was considered while selecting the communities for better representation. Akure was divided into east, west, north and south and at least one community was selected in each location. Two of the selected communities are located near important educational institutions in the neighbouring residential layout.
4) **Socio- economic levels:** Residential layouts in Akure city are zoned by town planners into different socio-economic levels; low, medium and high. The

selected communities comprised various income classification ranging from low to high income level as well as different occupational background.

Table 4.1 and Figure 4.1 below shows the five selected communities within Akure suburban area for in-depth study. The communities were purposefully selected even though there are equally suitable alternatives within the different categories. Consideration was given to communities where there is availability and accessibility to information as a result of viability of data collection. In this study only the sub-urban areas of the city were considered and the selected infrastructures were road and water.

Table 4. 1: Selected Communities.

S/N	Communities	Ownership	Cultural Characteristics	Geographical Location	Socio-economic Levels
1	Aba-Oyo	Private	New settlements (Family Land)	North - West	Low and Medium
2	Awule	Private and government	Traditional settlement (headed by a King)	North West	Low, Medium and High
3	Obaile	Private and government	Traditional settlement (headed by a King)	East	Low, Medium and High
4	Ijoka	Private	Traditional settlement headed by a Local Chief	South	Low and Medium
5	Omoniyi	Private	New settlement (Family Land)	North East	Low and Medium

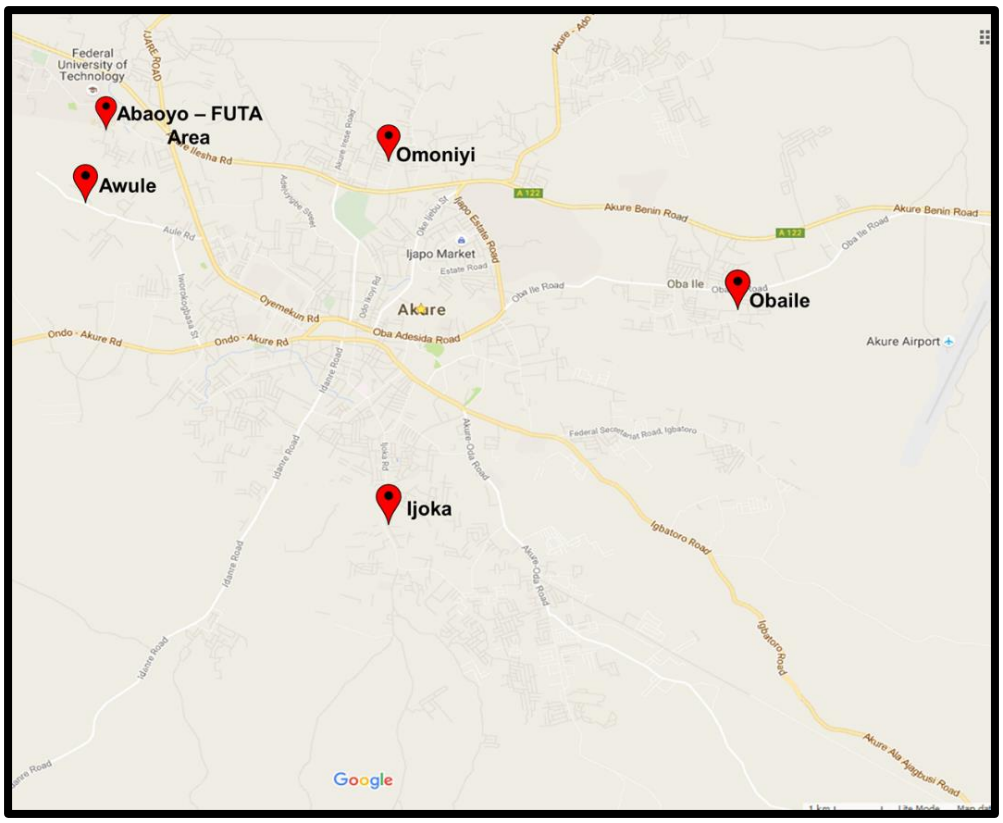

Figure 4. 1: Map of Akure South Local Government Showing the Selected Communities
Source: Google Map Accessed in 30.07.2016.

4.3 Data Collection Methods

This study is qualitative in nature and the target population consisted; residents of selected communities (household heads); Community leaders; Community Based Organisations (CBO's) such as Landlord Association; Government officials (Local and State). Prior to fieldwork, the preparation for the field study involved several activities that began with definition of the research scope which according to Yin, (2008) is an important guide to defining the research approach and analysis. The activities carried out during the field study and timings are summarised in Table 4.2 while data collection strategy is shown below in Figure 4.2, interview, focus group, field and participatory observations are the selected instruments. Three months (September 11th – December 11th 2011) field work was undertaken in Nigeria to collect the core data for the research.

Table 4. 2: Fieldwork Activities and Timing.

DESCRIPTION	DURATION	ACTIVITES
Prior to Fieldwork	June – August 2011	• Defined the research scope • Designed the research methodology • Selected the case studies • Selected the research instrument • Prepared the interview question • Prepared focus group discussion guide
Main Fieldwork		
	19th – 23rd of September 2011	• Training of research assistants. • Reconnaissance survey of selected case study • Pilot testing of interview questions guide • Official notification and consent of CBO leaders and key government agencies, officials about intended research.
Direct `Observation	24th of September, 2011	• Observation of Awule and Abaoyo Communities (CBO) meeting
	29th of October 2011	• Observation of Ijoka Community (CBO) meeting
	26th of November	• Observation of Obaile and Omoniyi Communities (CBO) meeting
In-depth Interview	26th of September – 22nd of October 2011	• Key stakeholder's interview (Residents (household), community/CBO leaders) • Field observations • Photographic documentation
	24th of October – 11th of November, 2011	• Interview of government officials • Field observations • Photographic documentation
Focus Group Discussions	2nd of November, 2011	• Academic Community (Federal University of Technology Akure, Ondo State Nigeria)
	6th of November, 2011	Asuwamo Landlady Associations Stakeholder's meeting
	13th of November, 2011	• Awule GRA Community
	16th of November, 2011	• Fatuase Residential Estate Obaile
	25th of November, 2011	• Stakeholder's Meeting
	26th of November – 8th of December 2011	• Preliminary Collation and Coding of Data

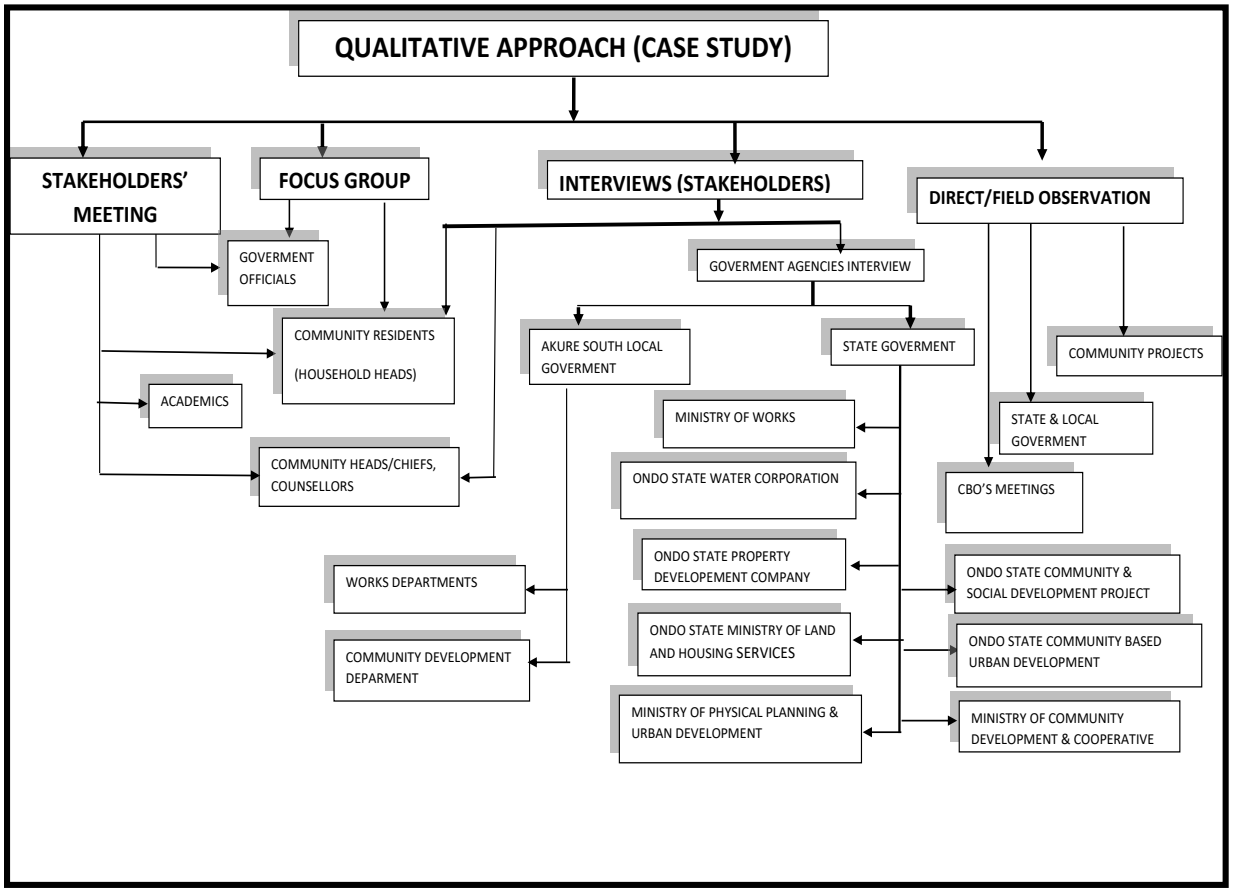

Figure 4. 2: Data Collection Strategy

Five suburban communities were selected within Akure city in order to assess the impact of community participation on adequate infrastructure provision in the suburban areas of the city. The communities are Awule, Abaoyo, Ijoka, Obaile and Omoniyi communities (see Table 4.1). These communities are located in both public and private residential layouts in order to assess the influence of location on the distribution of public infrastructure provision, the approaches and level of participation. Also the spatial selection ensures that the communities belonged to different density zones and income classification. This also enabled the researcher to assess the level of involvement in the decision process and factors influencing community participation.

The field study was planned to last for 3 months, the study involved the use of different tools which are mainly qualitative. Semi structured in-depth interviews, focus group discussion, direct observation and field observation were qualitative data collection tools employed. The semi structured in-depth interviews, focus groups and direct observations of the CBO's meetings were audio-taped and videotaped where allowed

which were later transcribed by the researcher. The data collection strategy was carried out in stages, first stage was conduction of in-depth (semi-structured) individual interviews with selected community residents within the case study gathered detailed information on their present and past involvements. It also included their perspective and commitment to community participation as well as their evaluation of public infrastructure provision, service delivery and community-based projects. Interviewees were selected from among household heads, the survey included both owner-occupants (35) and tenants (25) believed to have basic knowledge of community activities.

Secondly, in-depth interviews were conducted with community/CBO leaders or councillors (local politicians) who have been involved in the communities' development programmes. These stages also include the interview of the officers or technical staff of the government agencies in charge of electricity, road and water provision both at the state and local government level. Ten government agencies were selected. The second stage also involved the field observation of both government and communal infrastructure projects carried out within the last five. Field notes were taken and they were descriptive, inferential and evaluative in nature, describing the setting. The community residing around the projects were engaged in interactive discussion so as to have an opinion of their perception of such project within their neighbourhood.

The third stage involved the direct observation of community meeting some of which coincided with the in-depth interview because of the timing of the monthly meetings. This helped the researcher to observe the decision making process and the levels of participation. Even though the researcher was a quiet observer, selected attendees were engaged in interactive discussion at the end of each meeting to get their opinion. Most of the CBO meetings takes place on the same day and time during the monthly Environmental Sanitation[2] period with restriction on vehicle or human movement, therefore the nature of case study necessitated that the researcher invited six research assistants to work with her during the fieldwork work and also had knowledge of selected cases. The research assistant are university graduates and students that had worked previously with the researcher on similar studies. They were equally trained in

[2] This is a two hours cleaning exercise that takes place on the last Saturday of every month between 7:00am – 10:00am for citizens to clean their surroundings and neighbourhoods to ensure a disease free environment

order to understand the issues been explored and they supported by assisting with audio/video recording, note taking of some of the CBO meetings. Likewise, for security purpose a research assistant also accompanied the researcher on all her fieldwork activities. The fourth and the last stage was the focus group discussion, four focus group and a stakeholders meeting was conducted. After collation of data and preliminary analysis while on field. The summary of data collection and stakeholders is shown in Table 4.3 below;

Table 4. 3: Summary of Stakeholders.

S/N	SOURCE	INFORMATION
1	**Government Sources** • Ministry of Works • Ondo State Water Corporation • Ministry of Lands and Property services • Ondo State Property Development Corporation	• Contribution to infrastructure development • Approach and source of finance, • Role in community driven development • Impact on adequacy of infrastructure • Limitation to application of community participation to infrastructure development
	• Ondo State Ministry of Community Development and Cooperatives • Ondo State Community Based Urban Development Projects • Ondo State Community and Social Development Agency	• Role of government and contribution to community driven development and empowerment issues, approach to community participation source of finance, impact of and limitation
2	**Local Authorities** Akure South Local Government	• Role of local authority in infrastructure provision, mode of operation and institutional aspects to enable integration of community participation. Limitations within local authorities regarding use of community participation.
3	**Community** Selected communities	• Role played, impacts observed with regard to participation and improving the environment.
4	**Community Based Organisation** Landlord Association Women Association	• Role of community and contribution to infrastructure provision, approach and source of income. Factors influencing community participation, empowerment issues and limitations
5	**Academia** Federal University of Technology Akure	• Infrastructure development process in Nigeria and the potential use of community participation as an approach

4.3.1 Data Collection Instruments

- ***Interviews***

The interview is an important data gathering method for qualitative approach. It is a discussion between the researcher and the respondent and has become the most recognised techniques for qualitative approach (Fontana and Frey, 2000). It is useful in an in-depth study and often originates from everyday activities or conversations; an interview usually covers a wide range of activities and social phenomena. The aim of an interview is "*to gather the descriptions of the life world of the interviewee with the intention of interpreting the meaning of the described phenomena"* (Kvale, 1983). Despite the limitations and criticism of interview techniques, it has made a vast contribution to the development of social science over the years and it is commonly used for obtaining information about individuals, groups and organizations in a society. Interview techniques helps the researcher to comprehend the interpersonal, experience, reaction, social and cultural aspects of the interviewees (Fetterman, 1989; Mason, 1996; Fontana and Frey, 2000).

The interview is a cost-effective way of obtaining information from large and scattered populations, it uncovers and explores meaning, perceptions and gives the researcher access to vast information that are often based on the respondents' ideas and opinion (Patton, 1990; Ackroyd and Hughes, 1992; Arksey and Knight, 1999). In-depth interview allows respondents opportunities to express their views without any restriction. This technique afforded the researcher the opportunity to ask follow up questions or probing questions as some of the questions are quite sensitive and would be difficult with the questionnaire strategy. The "why" and "how" components of the research questions are subjected to the interview mode which according to Yin (2003) are more explanatory and often lead to the use of case studies. Interviews were conducted both in English and Yoruba languages where necessary so as to avoid the language barrier since it is the predominant local language spoken in the study area. Interviews were conducted with relevant stakeholders (see Table 4.3) who are responsible for provision of public infrastructure in Akure and stakeholders involved in community self-help projects:

i) Officials of key government agencies in charge of the selected infrastructure developments in Akure
ii) Community based organisations leaders or their representatives within the study area
iii) Community leaders/counsellors in charge of the communities within the study area
iv) Community residents: household heads were the target and could be the landlord; tenants or a representative.

In order to understand local community involvement in infrastructure provision, residents were interviewed with the use of key questions during the semi-structured interviews (Appendix B). The interview guide was based on keywords that reflect the empirical research questions allowing for further discussion to be generated. Also interviews are conducted with key government officials representing the agencies in charge of infrastructure development using key questions (Appendix C). They are identified as 'government agencies' in data collection strategy (see Figure 4.2). There were two objectives of holding the interviews with key government officials. First, there was the need to assess their understanding of 'community Participation'. Secondly, it helped to explore the viewpoint of government officials concerning the community-driven infrastructure development programmes in Akure sub-urban areas. Key personalities such as CBO/community leaders were interviewed (Appendix D) in order to understand the participatory process. Some of the community self-help projects were visited and the opinions of the residents and observations were noted in order to gather relevant information on impact of communal projects on adequacy of provision. Table 4.4 below shows the number of selected CBO's and individual interview conducted.

Table 4. 4: Interviews Conducted in the Selected Communities.

Community	Locations	Ownership Status	Numbers of CBO's	Number of Selected CBO's	Number of Interviews
Awule	Awule Government Residential Estate	Government	4	1	5
	Apatapiti II Layout (private layout)	Private	2	1	5
	Asuwamo Estate	Private	4	2 (including a women Association)	5
Ijoka	Ilotin Family Layout	Private	1	1	5
	Abusoro Layout	Private	2	1	5
	Odopo Family Layout	Private	1	1	5
Aba-Oyo	Ifelodun family Layout	Private	1	1	5
	Alaba Layout	Private	2	1	5
	Elekinran Family Layout	Private	1	1	5
Omoniyi	Omoniyi Estate	Private	1	1	5
Obaile	Obaile Government Residential Area	Government	4	1	5
	Fatuase Family Layout	Private	1	1	5
TOTAL			**26**	**13**	**60**

At the inception of the field study, the researcher set out to make every interview session to be a face to face interview and all recorded. In the course of data gathering the researcher realised that that it was impossible to have all interviews recorded due to the reluctance of respondents to have their voices recorded or to discuss certain questions relating to socio-economic status. 44 face to face interviews were conducted where the respondents were willing and ready while a self-filled version of semi-structured questionnaire was used where a respondent have restriction but is willing to participate. Such restriction included disability (deaf or dumb), religious and cultural restrictions. This was done to ensure full representation in order to strengthen data collected. During the interview it was discovered that respondents were uncomfortable with discussing certain questions such as number of children, age etc. because in Yoruba culture it not acceptable to discuss such issue. It is considered a taboo and some respondents will rather write it down than say it. The total number of residents interviewed was 60. Purposive sampling method was used. Table 4.5 shows the total number of government officials interviewed and the agencies selected.

Table 4. 5: Number of Government Officials Interviewed.

Name of Agency		No of Interview
1	Akure South Local Government	3
2	Ondo State Ministry of Works	2
3	Ondo State Water Corporation	2
4	Ondo State Ministry of Land and Housing Services	3
5	Ondo State Property Development Corporation	2
6	Ondo State Ministry of Physical Planning and Urban Development	2
7	Ondo State Ministry of Community Development and Cooperatives	2
8	Ondo State Community Based Urban Development Projects	2
	Ondo State Community and Social Development Agency	2
	Total	19

- ***Focus Groups***

Focus group discussion is also referred to as group interview by the early users of this method and it could be used as a primary source of gathering information, it often involves the blending of observation and interview method while discussing with a group. Focus group discussions could be formal or informal gatherings of people to discuss issues that are of mutual interest it provides an opportunity for open discussion which enables the researcher to record qualitative information (Morgan and Spanish, 1984). In this study, a cluster approach was used in organising each focus group so as to ensure good representation. The use of the focus group discussion was a source of verification of issues arising out of the preliminary analysis of in-depth interviews conducted and key issues in the research questions. The role of the researcher was to facilitate the discussions by asking main questions (see Appendix D) in order to encourage responses from participants It allowed free-flowing in-depth conversation between participants with little prompting from the researcher when necessary however researcher was careful to avoid leading the participants.

The initial plan was to conduct two focus group discussions within the private and government residential layouts but the researcher ended up conducting four focus group discussions and a stakeholder meeting. This was because a CBO meeting observation was turned into a focus group discussion, I had earlier planned on observing the meeting (Asuwamo Women Association) and subsequently interview

some of the leaders. Since many members were not in attendance, the executives decided on a group discussion so that members could contribute and make their opinion known or correct the executives. All the focus groups were conducted in a free and conducive environment in the home of one the participants apart from the Academic focus group which took place in the board room of FUTA Alumni office. The following focus group discussions were conducted;

(1) Academic Community (Federal University of Technology Akure, Ondo State Nigeria)
(2) Asuwamo Landlady Association[3], Asuwamo Community, Akure.
(3) CBO's leaders Awule GRA Community.
(4) Residents of Fatuase Residential Estate Obaile Community (private layout)

- ***Stakeholders Meeting***

It was initially designed to be the fifth focus group discussion and feedback session where all stakeholders involved in infrastructure development within Akure suburban areas meet to discuss findings and issues discovered during the field study. There was unanticipated turnout of participants ready and desirous to participate in the discussion. This was due to invited representative extending invitations to other members of their organisation that they felt will benefitted from the exercise. For example, only the chairman and supervisory counsellor for community development in Akure Local Government were invited but they came with four other officials. Also members of CBOs who had never had the opportunity to have a round table discussion with officials of development agencies seized the opportunity to invite other members. There were thirty-six participant; nine females and twenty-seven males. Five youth representatives were among the participant out of which four were females. Among the participants were academics, government officials, residents, CBO leaders and representatives of private layout owners or original settlers popularly known as "Omo Onile" in Yoruba language. There was voice and video recording of the stakeholder meeting.

[3] In this research 'Landlord' is use synonymous to home-owner as this is the name by which home owners are called in the study area. Landlords are landowners and private home-owners who owns houses which may be owner occupied, rented or lease to others.

- ***Direct Observation and Field Observation***

This is a qualitative approach method that involves listening and looking, observing event and scenarios, observation techniques allows the researcher to study people in their natural setting and particular social conditions. There are two types; direct and participant observation, the type of observation method adopted depended on time factor and how familiar a researcher is with the observed group. In this study the direct observation method was adopted, it is different from participant observation as the researcher did not participate while observing the community meeting and was un-obstructive as possible. Direct observation provides a means for triangulation by testing data from observation against published researches, desk records and what people say in interviews.

The direct observation approach was employed to examine communal decision making process and implications on infrastructure development. It allowed the researcher to interact with residents after the community meeting to obtain information on issues or key scenarios closely connected with participation process between the community, CBOs, government's agencies and politicians. It was difficult for the researcher to personally observe all the community meetings in the case study due to time constraints as most of the associations meeting were fixed on the same day which is the last Saturday of every month between 7:00am and 10:00am. This is the most suitable time for residents' association meeting since it is the day designated by the Ondo State Government for cleaning of environment popularly known as "Environmental Sanitation Day Exercise". Movement is restricted at this period and anybody caught disobeying is promptly prosecuted by mobile environmental courts. All the selected communities use this period for their community meetings and communal projects such as clearing and cutting of surrounding bushes; filling up of pot holes and erosion on community road; clearing and cleaning of drainages.

Research Assistants helped in the audio and video recording of CBO meetings and in the note taking of meetings. They also assisted with the translation where interviews were conducted in Yoruba language or Akure dialect as 4 of the 5 research assistants could speak these local dialects fluently. The fifth assisted with transportation throughout the fieldwork. Recording of all the observed CBO meetings and transcribing further removed the risk of researcher or the research assistant's bias and influencing of data collected. Field observation which is another type of observation method was

used to obtained necessary information on the existing government and community projects. This was carried out at the same time with the in-depth interview process in Asuwamo Landlady Association meeting.

4.4 Data Analysis and Interpretation

The use of qualitative methods to gather data for this research offered both potentials and challenges for the data analysis which focused on thorough examination of the data to discover and describe the involvement of communities and the application of community participation in infrastructure development. The qualitative data was analysed based on the objectives of the study and identified issues, this was followed by full description of the transformed data which formed the main discussion points at the data interpretation stage. An important feature of the qualitative data analysis process is the sorting and sifting of data in order to detect categories which require the researcher to write out the data as text first for ease of identification of important issues and concepts. Researcher was able to develop a deep understanding of the data (text) through a recurrent process of reading and studying of transcript, before constructing relevant themes some of which were informed by research objectives and some important thoughts that were put forward by the respondents (see Appendix F)

Attempt was made to use the Nvivo software packages as analysis tool to code and categorise the textual data, however due to its complexity it was abandoned. I manually coded and analysed the textual data transcribed from qualitative methods while simple statistical analysis was use to present some data. The important key output was to develop meaningful patterns to support the research process. The sifting and sorting of data was particularly challenging because of the volume of data involved, however the research questions and objectives were used as a guide, they were routinely applied to the transcript based on researcher's judgements regarding the meaning and relevance. This helped to identify main points which were triangulated by integrating all the data collected using the different data collection techniques e.g. the use of focus groups and structured interviews techniques was valuable in assessing data from the various sources. Triangulation helps reduces the inadequacies of the use of a single research technique and biases arising from the researcher, it is a means of validating research which enhances the reliability of research findings (Tobin and Begley, 2004; Yin, 2009).

4.5 Ethical Considerations

There are several code of ethics involves in **c**onventional social science research. They are based on four main principles which include informed consent, accuracy, confidentiality and absence of deception (Christians, 2005). People have the right to protect their privacy and identities, therefore confidentiality and anonymity was given outmost consideration in the study. Although this was somehow difficult in the cases of the government agencies due to the uniqueness of infrastructures understudy. It may be possible for reasonable guesses of the identity of the individual or organisation however informed consent was granted by the interviewees. Also permission was sought from community and CBO leaders before commencing field work activities and interaction with the community residents in all the selected communities. Consent was sought after initial introduction, provision of research details and other relevant information, including my university identification. However, the researcher also made sure that no inducement of any kind was granted to encourage any individual or group to take part in the research.

The issue of proper presentation and accuracy was raised by many of the community leaders and residents interviewed, they were concerned about the presentation and reporting of the information provided. In order to avoid distorted presentation or inaccuracy, narratives by the community residents or key informants were presented using the original wordings or accurate translations where narratives were in Yoruba. The local language 'Yoruba' was used during most of the discussions and interviews, it is the predominant language spoken in western part of Nigeria and it is a commonly understood language. A few of the individual interviews were conducted in the local Akure dialect only known and spoken within the locality or case study. The researcher was able to translate the discussions and present them in the thesis in a manner depicting the participants' view.

It was virtually impossible to meet with every interviewee to discuss research findings however major findings were presented and discussed during the stakeholders meeting held in the third month of the fieldwork. Participants were drawn from all the selected communities and government agencies including many of the interviewees. The meeting was conducted in order to provide a forum for all the major stakeholders involved in provision of road and water infrastructure to discuss the issues identified by researcher in the course of the field work. This was done in order to validate

information gathered so as to avoid misrepresentation and bias. It was also an opportunity for enlightenment as it was an opportunity for the CBO leaders and resident present to present their problems and view concerning the development of their communities.

4.6 Limitations of the Field Study

Several limitations were experienced during the course of the fieldwork. These included: resource limitations, difficulty of the selection of focus group participants, suspicion by members of the community and secrecy on the part of the government officials. Another limitation was the period the field work was conducted, it was few months before the governorship election and therefore there was utmost secrecy and suspicion on the part of the officials of the government agencies. Anybody seeking information on the performances and activities of government agencies were seen as political informants, the researcher had to provide additional identifications from my home university[4] before access to some information and records of the activities of the ministries were released.

During the focus group discussion, a deliberate effort was made to ensure gender balance which sometimes can be difficult due to cultural factors but being a female researcher encouraged women to participate in the discussions. Most CBO's activities are dominated by men and women are considered as silent participants, however the researcher was able to identify some predominant female groups, in such cases, only women were present and they were able to share their views openly. Likewise, some interviewees refused voice recording and many will only write out their response to some socio-economic questions such as number of children, age etc. because of cultural constraints. The researcher had to amend the interview questions to suit each participant and it was a time consuming exercise. Also the numbers of participants in the focus groups were initially planned to be not more than ten or less than five for the purpose of controlling and managing the sessions. One of meeting observation (women group) was turned into focus group discussion due to the insistence of the CBO's leader to involve other members in the interview; the numbers of participant in this case was higher than planned.

[4] This is the university where the researcher was working before commencing the PhD study. The additional identification was a letter of introduction from the researcher's head of department.

Furthermore, it should not be assumed that participants of focus group discussions represent the view of the entire community even though they seem to demonstrate a good knowledge of the activities of their CBOs. The same constraints applied to the inclusion of experts from government agencies as only a few selected government officials were interviewed during the fieldwork. It was not logistically possible to solicit the views of all experts involved in infrastructure development. The study therefore presents a section of inputs of all those involved in infrastructure development in the sub-urban areas of Akure city. The researcher chose to conduct the research in two communities (Awule GRA and Apatapiti layout) where she had lived and worked prior to the study. This was done to gain more experience and she used these 'familiar' communities as reference and control cases. In the other new settings, the researcher was initially treated with suspicion by members of the communities. This is because of their past experiences with government officials and political campaigners and the slow progress of government projects. In some instance it took the intervention of the community/CBO leaders for some residents to grant the individual interviews.

Lastly the issue of security was a major limitation as the field work survey was conducted close to the governorship election period in Ondo state. The state is known in the past to be volatile during election period therefore there was tension and suspicion whenever issues on government performances or outputs were raised. This led to lengthy explanation and protocols which was time wasting. One of my research assistants was also arrested by Anti-robbery policemen in the course of conducting interviews with government officials. The interviews required that we move between different government agencies and the only means of transportation was motorbike. The bike man transporting us was stopped by a traffic warden who seized the motorbike keys due to his refusal to give a "financial inducement" i.e. bribe. Every attempt to resolve the problem between the bike man and the traffic police officer was refuted.

My research assistant got slapped, by the traffic officer and arrested by anti-robbery patrol. He was accused of fraud and cybercrime popularly known as 'Yahoo boys' in Nigeria. The only reason the researcher was not arrested was because she is a woman and the fact that the laptop and the recording equipment were in the possession of her research assistant. The whole day was spent seeking his release from the police station with the help of friends and an understanding of the superior officer heading the

police station. He was willing to listen to the researcher's account of the altercation and apologised for the error made by his officers.

4.7 Reflection on the Research Methodology

A significant aspect of this research work is providing insight into what data is needed, 'who' to access information from and 'how' to obtain the information. Making these decisions before going for fieldwork was challenging because they were based on the assumption that organisations and individual will readily give their consent and information. The fieldwork however coincided with the penultimate campaign for state governorship election and many government officials were cautious of whom they allow to access certain information because of political subterfuge and the fear of losing their jobs. In spite of the difficulties, it was possible to negotiate access in each case based on the participant's voluntary and informed consent. Access to participants was negotiated through the community based organisation which began with the researcher introducing herself to community/CBO leaders and members with the presentation of letters of introduction from my Study University and additional documents obtained from my university in Nigeria. Subsequently the researcher was introduced to members of the communities and participants were assured that any information obtained would only be used for academic purpose with individual identities treated in confidence. The researcher then briefed participants on the purpose of the research, the type of information required and any ethical implications such as privacy and confidentiality in order to eliminate suspicions and fears.

With regard to the collection of documents reviewed, the same approach was adopted but in this case the researcher gained access through the heads of the organisation, this was done in order to avoid unethical complications such as demand for financial induce. It is important for a researcher to factor in ethical concerns for every aspect of a research process (Sultana, 2007 and Mbathi, 2013). Sultana (2007) further argued that researcher's reflexivity and positionality must start right from the conception of the research to the conclusion This involves researcher self-reflection on process, representation, consideration of power relations and politics as well as researcher accountability in data collection and interpretation of the research process (Sultana, 2007). In line with this, the researcher took extra caution as past experience has shown that government officials in Nigeria are known to ask for bribes or compensation in exchange for information. To avoid this, the researcher gained access through the

heads of organisation who subsequently facilitated the release of desk records and information to researcher. Also the research topic generated interests among participants and many government officials were willing to participate as they themselves live in suburban areas and have first-hand experience of the state of infrastructure in this part of Akure city.

4.8 Chapter Summary.

This chapter explained the details of the case study research design and the justification for a qualitative research strategy. The method employed for data collection techniques; interview, focus group, observation and stakeholders meeting. Qualitative analysis and simple descriptive statistical data analysis was used to present findings on institutional framework, public provision and community involvement in infrastructure provision. These are discussed in chapters 6, 7 and 8 respectively.

Chapter 5. Institutional Framework

5.1 Introduction

The chapter provides background information on the public development agencies and their responsibilities regarding road and water infrastructure. It also reports the findings from interviews of key government officials in public agencies and community leaders on the institutional framework for infrastructure development in the suburban areas of Akure city. Also presented are the data analysis and discussions on the processes for road and water provision in Akure city. Data analyzed includes focus group discussions, documents and desk records of government agencies in Akure city.

5.2 Institution Framework for Public infrastructure provision in Akure

Findings from the field study revealed that there are nine government agencies involved in the provision and management of infrastructure development in the suburban areas of Akure city (see Table 5.1). Eight of these agencies are state-based while the ninth is a local government authority. Furthermore, three of the state-based agencies are community driven development (CDD) agencies. These agencies are in charge of the planning, designing, implementation and delivery of infrastructures in Akure city.

Two key development agencies; Ondo State Ministry of Works (OSMW) and Ondo State Water Corporation (OSWC) have the regulatory roles for road and water provision in Akure city. However, the field study revealed that they are also the major stakeholder in the delivery of these infrastructures. They act both as regulators and providers as shown in Table 5.1.

Table 5.1: Government Agencies in Charge of Infrastructure Development

S/N	GOVERNMENT INSTITUTIONS (Ministries, Agencies, Departments) (MDA's)	ROLE	FUNCTIONS	LEVEL OF INVOLVEMENT
	KEY STATE-BASED AGENCIES			
1	**Ondo State Ministry of Works**	• Regulator • Delivery	• Planning, designing, implementing and construction of urban road project in Akure city and other urban areas in Ondo state • Regulates all road construction in Ondo State	• Road (Trunk B)
2	**Ondo State Water Corporation (OSWC)**	• Regulator • Delivery	• Planning, designing and implementation of water projects • Regulates all public water delivery in Ondo State	• Water treatment and distribution • Pipe borne water • Boreholes
	OTHER STATE-BASED AGENCIES			
3	**Ondo State Ministry of Physical Planning and Urban Development (OSMPPUD)**	• Planning	• Planning designing and approval of infrastructure developments • Review of Master Plan • Monitoring & Evaluation	• Physical planning • Master plan development • Planning permission
4	**Ondo State Ministry of Land and Housing Services (OSMLH)**	• Management	• Allocation of public land and housing provision • Management of infrastructure provision in all Government Residential Area (Awule GRA)	• Road (Trunk C)
5	**Ondo State Property Development Corporation (OSDPC)**	• Management	• Allocation of public land and housing provision • Management of infrastructure provision in Government Residential Area (Obaile GRA)	• Road (trunk C)
	COMMUNITY DRIVEN DEVELOPMENT AGENCIES			
6	**Ondo State Community and Social Development Agency (CSDA)**	• Delivery	• Community driven development in rural areas • Improve access of the poor to social infrastructure • Facilitate and increase community and LGA partnership	• Road (Trunk C) • Water: Boreholes • All other types of infrastructure
7	**Ondo State Community Based Urban Development Agency (CBUDA)**	• Delivery	• • Community driven development in the urban areas • Improve access of the urban poor to social infrastructure	• Road (Trunk C) • Water - Boreholes
8	**Ondo State Ministry of Community Development and Cooperative (MCDC)**	• Delivery	• • Community driven development in the rural areas • Improve infrastructure delivery in the rural areas of Ondo state	• Road (Trunk C) • Water – Boreholes
	LOCAL-BASED INSTITUTION			
9	**Akure South Local Government (AKSLG)**	• Delivery	• Responsible for the provision of trunk C roads. • Also in charge of local community development at the grass root.	• Road (Trunk C) • Boreholes • Hand dug well

5.2.1 Road Infrastructure

Road networks within Akure city are classified into three groups, highway (trunk A), urban roads (trunk B) and community roads (trunk C) as shown in Figure 5.1**.** Trunk 'A' roads are highways connecting Ondo State with other neighbouring states and are the responsibility of the Federal Ministry of Works. The only highway in Akure city is the Ilesha – Benin express way. Trunk 'B' roads are urban roads and they are major road networks connecting different communities within the Akure city while the community roads are local access roads within all settlements. Trunk 'B' and Trunk 'C road networks are within this case study, Trunk 'A' road networks are not. The Trunk 'B' which are urban road networks are the responsibility of Ondo State Ministry of Works. They are responsible for the construction of new roads and maintenance of all the existing urban road network running through the city.

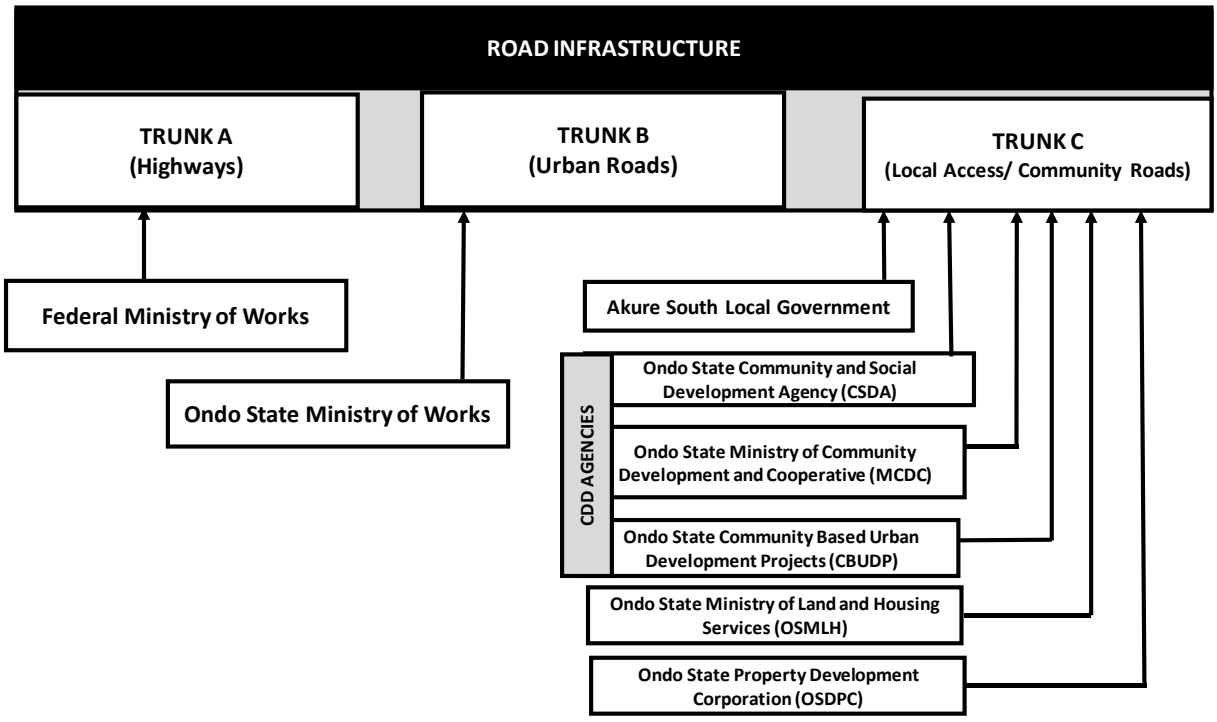

Figure 5. 1: Institutional framework for Road Infrastructure in Akure

The Ministry of Works sometimes repairs damaged sections of the federal highways within Akure city in order to ensure safety of road users even though it is not their main responsibility. The Ministry of Works has a dual role of acting as both the regulator for public and private supply of road infrastructure while at the same time acting as a delivery agency. They construct new roads as well as maintain all the existing urban roads through direct labour, contracting and in-house implementation. Although

construction and maintenance are sometimes carried out by staff of the agency, most of the new road constructions are contracted out as explained by the Deputy Director of Works;

> *"We don't have enough equipment and staff to undertake all the road construction in Akure, therefore we usually concentrate on the maintenance of the existing roads, while we supervise new projects. We are also supposed to monitor all the activities of all other agencies involved in the provision of road in order to ensure their compliance" ….* **(OSMW, GA: 5)**

Akure South Local Government have vital role in ensuring adequate provision and maintenance of Trunk 'C' road networks in the case study but due to their lack of funding, they are unable to fulfil their role. The establishment of the community driven development (CDD) agencies is a benefit as they are able to take some of the responsibility of the local government as explained by interviewee;

> *The local government has been struggling with the huge responsibility placed on the level of government. CDD agencies were established to work with the local government although CDD programmes are solely our projects but we have to align with the local government because it is geared towards the development of the grassroots. We are able to provide funds and technical expertise but the local government is supposed to work with the local community in respect of the management of the infrastructure* (**MCDC Commissioner, GA: 12)**

The CDD agencies are Ondo State Community and Social Development Agency (CSDA); Ondo State Community Based Urban Development Projects (CBDUA) and Ondo State Ministry of Community Development and Cooperative (MCDC). They adopted the bottom-up approach unlike Akure South Local government which adopts top-down approach to road development within the study area. CDD agencies are only involved in the provision of road infrastructure in certain areas of Akure city. Community |Based Urban Development are only involved in provision of road networks in core urban areas of Akure city while both Community and Social Development; and Ministry of Community Development and Cooperatives are only involved in road construction in rural area. Table 5.2 shows that Akure South Local Government has greater responsibilities compared with other agencies. Except for few urban road networks within the case study the rest of the roads are classified as Trunk 'C' road.

Table 5. 2: Government Agencies Responsible for Provision and Maintenance of Road Infrastructure in the Case Study.

COMMUNITY	LOCATION	AGENCIES
Awule	Awule Government Residential Areas (Zone D)	• Ministry of Works • Ministry of Land and Housing Services
	Apatapiti II Layout	• Akure South Local Government
	Asuwamo Estate	• Akure South Local Government
Ijoka	Ilotin Family Layout	• Akure South Local Government
	Abusoro Layout	• Akure South Local Government
	Esure-Odopo Family Layout	• Akure South Local Government
Aba-Oyo	Ifelodun family Layout	• Akure South Local Government
	Alaba Layout	• Akure South Local Government
	Elekinran Family Layout	• Akure South Local Government
Omoniyi	Omoniyi Estate	• Akure South Local Government
Obaile	Obaile Government Residential Area (Zone A)	• Ministry of Works • Ondo State Property Development Corporation
	Fatuase Family Layout	• Akure South Local Government

The community leaders confirm the roles of government agencies especially on the inadequacies of the local government during their group discussion as explained by a community leader

> "Each *time we've approached the Ministry of Works for help, we were always directed to the local government that they are not in charge. Whenever we ask for help from the local government, we are told that we are living in the government residential estate, therefore we should go back to ministry of works. On every of these occasion we argue with the local government officials that we are part of the suburban communities. We are neither rural nor urban and that CDD agencies does not attend to our request* **(Community leader, Awule GRA, FG2:1).**

Access road within the two government residential estate (GRAs) are the responsibilities of Ministry of Works even though the GRAs are located in suburban area, the local government does to respond to requests from GRAs. It is a strategy devised to reduce the responsibilities of the local government. Furthermore, the Akure

South Local Government have residential estate in which they are solely responsible for the provision of infrastructure, as explained by Director of Works thus:

> *"The Local Government chairman desires to meet all the demands for road network and water infrastructure most especially all the inner access roads and unclassified roads but we don't have the funding. This does not include the government estates (GRAs) as they are supposed to be serviced plots sold to the public by the state government. Therefore, Ministry of Works is in charge of all government estates except those owned by the Local Government. Even though these road networks are still classified as Trunk 'C', unfortunately we cannot include them as our responsibility because of inadequate finance….* ***(Director of Works & Services; AKSLG, GA: 2)***

The comment above illustrate that Akure South Local Government Authority is also responsible for the provision of other basic amenities to local communities. This buttress (Felix, 2012) claims that government agencies make the choices of their priorities from time to time regardless of their institutional roles. Section 7(1) of the 1999 constitution of the Federal Republic of Nigeria explicitly established the creation of democratically elected local government system and the functions of local government is defined in schedule 4 of the same constitution (Olurankinse, 2011). Local government bridges the supply gap of infrastructure provision between the urban and rural and complement the provision by the state and federal government. They are also mandated to stimulate grassroots development and public participation at the local level in their communities. The Nigerian constitution stipulates that local governments are responsible for the construction and maintenance for 60% of all the community or local access road (Trunk 'C').

Investigation revealed that there are only three urban road networks within the case studies. These are Awule-FUTA road, Ijoka- hospital road and Obaile - Airport road. The Awule - FUTA road connects Awule and Aba-Oyo Communities with the Federal University of Technology and the city centre. It was upgraded from Trunk 'C' to Trunk 'B' in 2008 as an alternative route to the university in order to reduce traffic congestion on the main road leading to the university. Ijoka-hospital road is the main road connecting the Ijoka communities with the State Specialist Hospital and the city centre, while the Obaile-Airport road is an alternative road from the city centre to the local airport in Akure. The Ministry of Works is responsible for the maintenance of these roads.

5.2.2 Water Infrastructure

Ondo State Water Corporation (OSWC) has the regulatory responsibility for planning, regulating and ensuring access to public provision of water services within Akure city and the entire Ondo state. The agency plans, design, implements, supervises and controls the use and consumption of water. The Water Corporation ensure the quality and quantity of water supplied and also prepares water services development plans in order to ensure affordable, efficient and sustainable access to water. There are other government agencies involved in the provision of potable water from solar or electric powered boreholes and motorised hand dug wells as shown in Figure 5.2.

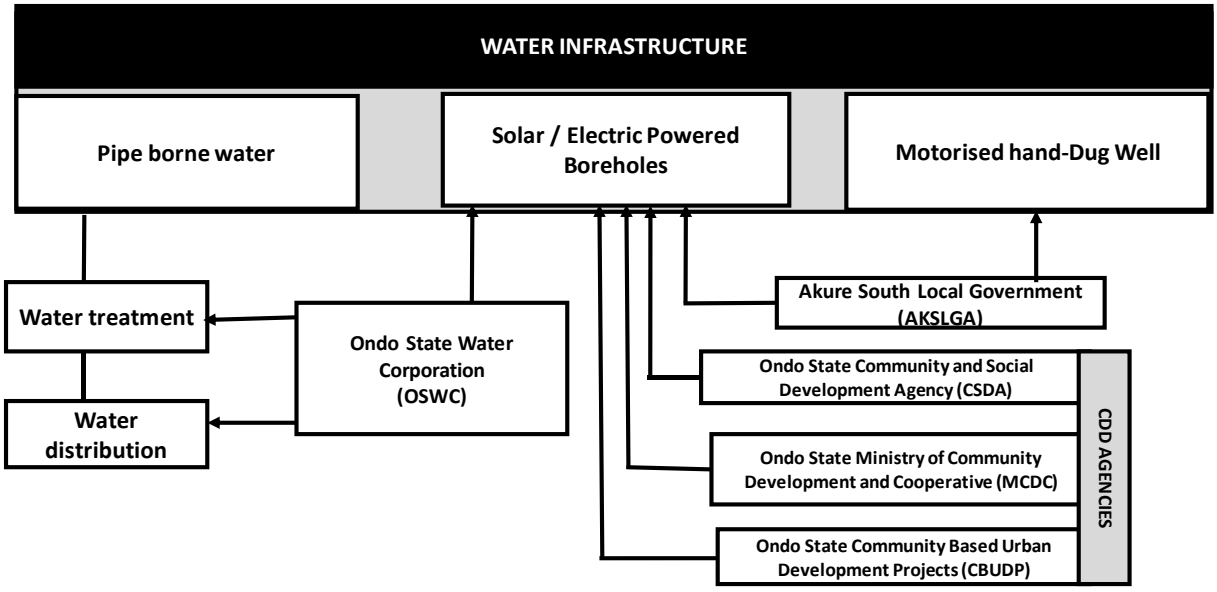

Figure 5.2: Institutional Framework for Water provision in Akure

OSWC also has with the main responsibility of regulating all public water provision and the operation of private water providers. The agency facilitates the construction and rehabilitation of existing pipe borne water infrastructure development in Akure city and is solely responsible for the treatment and distribution of portable water. In order to improve water delivery in Akure city, the state government introduced boreholes construction in suburban areas and other remote locations lacking pipe borne water connection. The water project coordinator explained that;

> "*It is costing the state government a great deal to repair all the damaged water pipes and the same time provide for other communities. The governor sought to find a cheaper alternative that will benefit more communities and decided on borehole and hand pump well in the case of some rural communities. Its*

completion is also faster and we try to make sure that there is at least one borehole in every community" **(*Project Supervisor, OSWC, GA: 18)***

The claim above was refuted by participants of academic group discussion, they emphasized on adequacy and that the boreholes only serve smaller proportion of the communities mostly those living close to the boreholes while many residents cannot easily access the boreholes;

*"The borehole initiative is good but it cannot solve the water problem as not many people have access to the boreholes. Also they are not well maintained so there are times that boreholes will not work for months. Likewise, those powered with electricity are nothing but 'decorations' because most of the time there is no electricity supply in Alaba layout. At a time, for over two months the CBO leader had to take his generator to the borehole to pump water before the community's damaged transformer was repaired…. **(Academic Focus Group,* **FG4:2)**

Another community leader alluded to the claim of the academic focus group that there are no government boreholes in this community despite several requests submitted for potable water. Another important finding is that OSWC does not regulate nor have interaction with private water vendors even though they procured the licence to operate as water vendor from the agency. The operations of the water vendors are monitored by the National Agency for Food and Drug Administration and Control (NAFDAC)[5] especially if they are selling sachet and bottled water (Ofuani *et al.*, 2015). The agency contracts all borehole water projects to private contracting firms so as to be able to increase the area of coverage, speed of completion as well as improving the efficiency and delivery time as stated by the project supervisor below;

"Our agency is tasked with a big responsibility to provide water for consumption and household needs within Akure but we don't have enough equipment's or man power to monitor the operation of private water vendors and to embark on so many major projects at the same time especially regarding borehole water projects. OSWC staff supervises contractors and the projects because it is cheaper…" **(OSWC, GA: 20)**

In addition to the above roles, the Water Corporation is also responsible for revenue collection and enforcement of payment of water charges within Akure and other parts

[55] NAFDAC is federal government agency in charge of food and drug control. This ensures that appropriate standard, guidelines, regulations for production of food, bottle water cosmetic and drugs are adhered to by producer in order to protect consumers in Nigeria (Ofuani et. al, 2015).

of Ondo State. In order to improve on the ease of collection of water rates the agency introduced water meters in many public main standing water taps in the urban areas.

5.3. Other Agencies Involved in Public Infrastructure Provision in Akure

5.3.1 Housing Agencies

There are two housing agencies that are involved in the provision and management of road and water infrastructure in the government residential areas within Akure sub-urban area. The agencies are responsible for the management of all public residential layouts in Akure city. They are Ondo State Ministry of Land and Housing Services and Ondo State Property and Development Corporation. The functions of each agency primarily comprise of supervision of land use which include zoning and land use regulations, allocation, sale, development, management of public land and housing delivery.

The Ministry of Land and Housing has seven government residential areas in Akure city including Awule GRA which was selected as a case study while Property Development Corporation has three government residential layouts within Akure city including Obaile GRA. The roles of both agencies initially did not include infrastructure provision rather they were established as supervisory land ministry and housing corporations as explained by Director of Land Services;

> *"State government has been unable to provide basic infrastructures in the GRA, for example in the Awule GRA, there is no water supply or good road network. As a result of inadequacies of infrastructure within the GRA's and the inability of Ministry of Works and Water Corporation to meet all the needs of the residents, we have to step in to mitigate some of the difficulties faced by the residents in the GRA's. Because of limited funds we can only assist in the grading of road in some cases -this is not part of our responsibility as we are not given allocations for such provision…* ***(OSMLHS, GA: 9)***

Most of the Government Residential Areas in Akure city were planned and designed as site and service scheme, they are land subdivisions which are supposed to be provided with basic amenities and sold to the general public for developments. However most of the public layouts in Akure lack these facilities and resident often rely on the assistance of supervisory land ministry in charge of the GRA to proffer temporary solutions to the most pressing needs while awaiting government provision as stated by the land officer below;

> *"The agency is aware of resident association efforts, they recently applied for road grader from Ministry of Works and we facilitated it. However, it is the responsibility of the landlord or resident association to pay the operator's fees and cost of diesel used..... (**Director of Lands, OSPDC, GA: 9)***

Ministry of Land and Housing and Property Development Corporation is forced to supply of basic amenities in the GRA's even though it outside the regulatory responsibilities of these agencies. However, they are only involved in road infrastructure as shown in Figure 5.1**.** This study further revealed that the contribution of both agencies to infrastructure delivery are limited due to lack of budgetary fund. Also there is little interaction between the officials of the agencies and resident's association even though there is a designated officer for each GRA.

> *"Each GRA have a designated officer who is supposed to be in charge of maintenance of infrastructure and also have meetings with the leaders of resident association in order to ascertain the needs of the occupiers. I am aware that they are not doing this and I cannot blame them because government is not fulfilling their responsibilities. If they attend the resident association meeting, they will only make promises and the residents could be hostile towards them…. **Principal Estate Officer (OSMLHS, GA: 7)***

It is the responsibility of these officials to meet with members of the resident's association members at least three times in a year or during their association meetings where possible. However, most estate officers neglect this role and their only contact with GRA's residents is when residents go to the agency's headquarters make requests or lay complaints;

> *We have invited some of the estate officer severally to come for our community meetings and see the projects we are doing but got no response. We wanted the officer to come and see the state of infrastructure in the estate….* **(Community Leader, Awule Community, CL: 18)**

The lack of interaction is resulting in wide gaps in the supply of infrastructure as there is no adequate record of the infrastructure needs of the residents nor or residents' collective contribution towards the development of road and water provision in both Awule and Obaile GRA's.

5.3.2 Physical Planning

The role of planning to the success of infrastructure delivery is huge. Every construction requires a planning permit. It is important that all activities of government agencies involved in the delivery of infrastructure in Akure sub-urban area complies with the strategic plan or master plan of the city. Likewise, every physical development requires land area permission and this can only be granted by the appropriate authority in charge of the master plan of Akure city. The Ondo State Ministry of Physical Planning and Urban Development is therefore the body mandated to formulate and implement policies on urban and regional development. They are responsible for the development and implementation of master plans and strategic development plans which guides all the developments in Akure city;

> *"Ministry of Physical Planning and Urban Development are not directly involved in the actual provision of road, electricity and water provision however we provide the base and guidelines which guides the activities of other agencies involved. We provide the physical planning of Akure city and also land uses…….* ***(Monitoring & Evaluation Officer; OSMPPUP, GA: 11)***

The agency also enforces adherence of developers to the building codes and town planning laws and regulations. The agency is responsible for the approval of all layouts and building plans including the desi plans for road, electricity and water infrastructure developments. The ministry also assists all the development agencies in the demolition of houses and fences that infringed on road setbacks during road construction. The road setbacks are often used for the installation of water pipes, boreholes etc. Likewise, the agency is involved in the preparation, implementation and enforcement of government's budgetary process and action plans for development of Akure city and other towns in the state such as urban renewal and slum upgrading programmes.

5.4 Difference between the CDD Agencies and Other Government Agencies

'CDD' is a participatory development approach to infrastructure developments and an institutional reform which requires joint participation and collaboration between all stakeholders in the provision of infrastructure services (Dongier *et al.*, 2003b). It is a form of community participation where the local community is in the driver seat while government only acts as the facilitator or enabler. The study revealed that the selection of Akure City as a beneficiary of the African Millennium City Initiative Projects encouraged the establishment of CDD agencies and the use of bottom-up approach in infrastructure development in Akure city;

> *"The millennium projects instigated the involvement of local communities in the development process as it was a popular approach. The success of the projects led to the establishment of other agencies and the training of staffs in the use of participatory rural appraisal which is totally different from the bureaucratic top-down approach we are used to……* ***(Academic Focus Group, FG4: 3)***

The project was supported by the UN Millennium Project (UNMP) and United Nations Development Programme (UNDP). This enabled the state government to access funding for infrastructure provision from the World Bank assisted community development projects in 2005. This further led to the introduction of Community Driven Development projects (CDD) and subsequent establishment of CDD agencies by the state government. Also in 2005 the Federal Government of Nigeria had an agreement with the World Bank to harmonise World Bank Funded Community Driven Development (CDD) projects in Nigeria as part of the 2005 – 2007 Country Partnership Strategy (CPS). The Country Partnership Strategy (CPS) is a framework for development assistance provided by the World Bank and the Department for International Development (DFID). It provided financial and technical assistance for local participation in infrastructure development process in order to promote economic growth in selected state governments in Nigeria.

In order to achieve the aim of this partnership, the Local Empowerment Environmental Management Project (LEEMP) and the Community Based Poverty Reduction Project (CPRP) were merged as Community Driven Development approach. Two of the CDD agencies were established through the World Bank initiatives namely; Ondo State Community Based Urban Development Projects (CBUDA) and Ondo State Community and Social Development Agency (CSDA). The agencies were established in 2005 and 2009 respectively and were initial attempts made by the state government to introduce community participation into institutional framework for infrastructure development. This was meant to improve local community involvement as well as LGA responsibility to infrastructure development as stated by CBDUP project development officer;

> *"World Bank provided most of the finances we used for the provision of infrastructure in the rural area of Ondo State in order to promote local participation in the development programmes and community groups are in charge of the projects. The agency is just a facilitator and support organisation; we train and equip community residents to identify and implement the projects that they want in their communities. We also provide 90% of total project cost*

> *while communities are expected to provide the remaining 10% which could be paid by their Local Government Authority who also assist the community. They are also in charge of the management and maintenance of the facility. The agency does not work in isolation, we do partner with other government agencies in the state for example, most electricity projects are carried out by Ondo State Electricity Board, therefore for any electricity project and we must inform and work with the board as mere facilitator…….* **(CBUDA Project Development Officer; GA: 15)**

Community Based Urban Development Agency (CBUDA) and Ondo State Community and Social Development Agency (CSDA) are both learning processes for institutional reform to infrastructure development in Akure City and each initiative was designed as a five-year plan. Community Based Urban Development Projects was planned to end in 2009 but finally finished in August 2011 and only focused on the development of core urban area of Akure city while Community and Social Development agencies provide infrastructure development focused on rural area of Ondo state. Furthermore, in 2009 the state government established a third CDD agency as explained by the state commissioner for community development;

> *"The success story of the World Bank CDD agency prompted the state government to establish MCDC. The new approach to development was applauded and embraced by the local communities. The state government has realised that people want to be engage in local development and it will reduce poverty and unemployment among our youth. Whenever we visit a community both the old and young even disabled come out to welcome us. We hope that gradually every development agency will adopt this approach…."* **(Commissioner for MCDC, GA: 12)**

Ministry of Community Development and Cooperative (MCDC) is predominantly and solely financed by the state government. The aim is to improve local access to infrastructure developments in the rural areas of Ondo state in order to reduce rural-urban drift to Akure city. The ministry was established based on three concepts popularly known as the "3i's" initiatives which form the objectives of the ministry. They are "infrastructure, institutions and industry". The first "I" "Infrastructure" is aimed at rebuilding lost confidence in government's ability to provide basic infrastructures. The second "I" is "Institution", targeted at the empowering rural communities for sustainable development by identifying existing and establishing new community institution, provision of financial and technical support for development and capacity building. MCDC also trains community leaders and CBOs about participatory governance. The third "I" "industry" is the identification and provision of credit finance for prospective and

viable industries and enterprise within local communities that could be developed to generate income for the local community. Furthermore, community based organisations are encouraged to establish small scale industries which are expected to provide sustainable employment, reduce poverty in order to reduce rural-urban migration to the Akure city and other urban areas in the state.

> *"The state governor realised one of the ways of combating youth unemployment is to encourage small scale industries. We also know that quite a lot of the CBO has already established joint business but are affected by lack of infrastructures. But with the CDD projects and financial assistance they will be able to employ some youth and at the same time eradicate poverty"* **(Commissioner for MCDC, GA: 12)**

The main aim of CDD programmes was integration of CDD into the institutional framework and budgeting at local, state and federal levels in order to improve the capacity of government agencies to facilitate and implement participatory development. Other responsibilities of CDD agencies includes the training of local community project management committee (CPMC) to identify community needs, use community social development plans as well as implement projects. They also have the mandate to use the resources efficiently in executing community projects. Lastly CDD projects is expected to influence and strengthen joint participation between Local Government Authority, the local communities and other government agencies involved in infrastructure development in Akure city.

5.5 CDD Stakeholders and Their Roles

This section highlights the roles of stakeholders involved in CDD initiatives and also examines the level of involvement of local communities. Community and Social Development and Community Based Urban Development Agency have the same structure and similar participants. They are both World Bank assisted development programmes even though their operation area is different. The agencies officials are responsible for implementing the institutional structure and initiating decision-making process. They also ensure that the recipients' communities take control of development and management of infrastructure projects and finance. Table 5.3 illustrated that the agencies also work in conjunction with the World Bank, the Federal Government of Nigeria (FGN) and the Ondo State government (ODSG), the Local Government Authority (LGA) of the community where the project is being sited and the community members. The World Bank provides 95% of the credit finance for both of

the agencies projects each. On the hand, Ondo state government (ODSG) provides the remaining 5% while the Federal Government of Nigeria (FGN) merely acted as guarantor for the finance since they signed the partnership with the World Bank.

Table 5. 3: Role of Stakeholders Involved in CSDA and CBUDA Projects.

S/N	INSTITUTION	STAKEHOLDERS	ROLE
1.	World Bank	• Sector group • Team Leader	• Provide 95% of the finance
2.	Federal	• Federal Project Steering Committee (FPSC) • Federal Project Support Unit (FPSU)	• Finance guarantor
3	State	• Board • Implementation Agency	• Provide 5% of the finance
4	Local Government Authority	• Local Government Authority • Local Government Review Committee:	• Provides 10% of the total cost of each community projects where the recipient communities are unable to provide the funding • Monitoring and Evaluation.
5	Community	• Community Development Association (CDA) • Community Project Management Committee (CPMC)	• Provide 10% of the total cost of community projects. • Identification of community needs list (project) • selection of three top projects for execution • Project Implementation Monitoring & Evaluation • Operation & Maintenance of the project
6	Agencies (CSDA and CBDUP)	• Project coordinator • Project development officers	• Provides 90% of the total cost of the projects • Supervises all projects • Capacity building

Source: CSDA and CBUDA Desk Record, (2011).

The recipient community is an important stake holder, however before they can receive any assistance from the CDD agencies, they must submit a written request made by the community leaders or representative. This is corroborated by Ilotin community leaders;

> "*We had to write a request in conjunction with Jaga community because it was a collaboration between our communities and was submitted by Jaga CBO chairman. We stated what we wanted which was two boreholes, one for each community. We already have an idea of the cost and have a letter of support*

from our local government to support our request…. **(Community Leader, Ilotin Layout; CL: 7)**

To qualify for CDD projects, any community making application must submit community development plan along with the filled application form in triplicate (see Appendix F) and certificate of registration with their respective local government authority. They also have to show proof that they can provide (10%) of the total cost of the projects by submitting the community's bank statement or proof of construction material up to the equivalent value. Local government's authorities are required to pay the (10%) for any community that does not have the money.

Additionally, local communities must possess a constitution guiding the conducts of the community project implementation committees and members. They are required to carry out the needs assessment of their community under the guidiance of the agencies officials while the final selection of projects of intervention are based on the community priority ranking. Officials of both agencies are not allowed to intervene or select CDD projects rather the community members and their representative (CPMC) make all the decision which are carried out in community meetings as explained by the project development officer.

"Once we selected a recipient community, our officials usually relate with the local residents for two months. We interact with the residents and together with the community leaders make a list of the community needs. The community is required to select five representatives who will be members of the Community Projects Management Committees. The final selection of the three top community projects is usually carried out by all the members of the committee and sometimes they have to vote where there is no consensus, we help to supervise that there is fairness and that the vulnerable groups are considered according to the guideline…… **(Project Development Officer, CSDA, GA: 19)**

Investigation revealed that community involvement in Ministry of Community Development and Cooperative's (MCDC) projects is different from those of the World Bank assisted agencies even though it was patterned after World Bank assisted agencies. The documents showed that recipient communities are required to contribute 20% of the total cost of project and while the other agencies only contribute 10%. Some of the respondent felt that may be too much for some communities to pay and where their local government are unable to make prompt payments, it may delay the projects as observed by a professor of Town Planning;

> *Why should there be a difference in the percentage community should pay? I think it is a way of discouraging many applicants because the agency knows that the local government does not have enough money to pay for everybody. It is the same local government that will also help the communities selected by the World Bank agencies (CSDA and CBD). Without the 20% MCDC will not release the fund for the projects so for such a community been selected has not solve their problem....* **(Academic Focus Group: FG4:1)**

Another difference is that the operations of MCDC are overseen by a statutory board which is chaired by the commissioner, the commissioner is a political appointee while other members are professionals from other development agencies. This is different from that of World Bank agencies where all the board members are professionals in the built environment. All the participants of the Academic focus group felt this is not right and that it may be affecting the decision-making process as explained below;

> *"Unanimously we all feel that an agency that is just been structured should be headed by a professional in the built environment. Particularly because of the new approach been introduced. MCDC is seen by many people as a political jamboree and a way of government granting to the wishes of their party members. They always televised all their activities with so many noise and pageantry which tell us that that they are not being sincere. It is the commissioner that is seen going around the communities, you see, we feel this is a campaigning strategy. Other CDD agencies are working seriously without any drama being displayed….* **(Academic Focus Group, FG4: 7)**

Lastly it was observed that the method of selecting final CDD projects for implementation is different. The final selection of projects is usually carried out by officials of Ministry of Community Development and Cooperative's in the headquarters after the community members have submitted their needs assessment reports as shown indicated in Table 5.4.

Table 5. 4: Roles of MCDC Stakeholders.

S/N	MCDC	STAKEHOLDERS	ROLE
1	State Government	• Statutory Board • Implementation Agency	• Provide the credit finance
2	Local Government Authority	• Local Government Authority • Local Government Review Committee (LGRC)	• Provides 20% of the total cost of each community projects where the recipient communities are unable to provide the fund • Projects monitoring ad evaluation.
3	MCDC Agency	• Project coordinator • Project Implementation officers • MCDC technical committee	• Provides 80% of the total cost of the project • Capacity building • Final selection of community self-help projects • Executes the 1st projects and supervises the other two projects selected by the communities
3	Community	• Community Development Association (CDA) • b) Community Change Champions	• Provide 20% of the total cost of community project. • Identification of community needs (project) and selection of three (3) topmost project • Implements the 2nd and 3rd projects • Monitoring & Evaluation • (f) Operation & Management of the project

Source: Desk Records of Ministry of Community Development and Cooperative. (2011)

Table 5.4 shows that MCDC official makes the final section implement the first projects without any input from the local communities using top-down approach. Community's needs are listed in order of priority with the three most pressing needs ranked highest. The commissioner explained that the first project is a trust building project tagged 'quick win *projects'* which will help to improve the motivation of local communities and will also be a learning process;

> *"It is important to rebuild the trust of the local communities especially those who have lost faith in the ability of the Nigerian government meeting their infrastructure needs. This is the reason that many rural dwellers migrate to the urban centre, they want better employment and access to good infrastructure. We are committed to working with the grassroots. The reason we do the final selection is that we have to consider the total cost of construction and how much is allocated to each community. Although there are really no limits but we want many communities to benefit. During the first project we do everything and expect that the CPMC will learn through it our officials supervises the construction of the remaining two projects…."* **(MCDC, Commissioner, GA: 12)**

Talking about this issue, participants of the academic focus group felt the difference in operations is because of political influence and the issue of transparency or else why change the community list if the community representatives were trained and supervised by MCDC official during the needs assessment? This reflects the preference of top-down approach and the difficulty of adjusting to a new approach as explained by participant;

> *"This buttress what we were saying that making a political appointee the head of MCDC will affect the operations. They really don't know much about participatory development and therefore maybe be approaching it a wrong way. They could have educated the community member and also tell them the financial threshold so that the communities will know the project to select but it is typical Nigeria way to hide the selection criteria in order to be able to manipulate. The World Bank agencies are clear and transparently and we believe it is because they are being monitored by World Bank officials […]* **(Academic Focus Group: FG4: 1)**

A key finding is that MCDC officials are not willing to let go of the top-down approach as it will limit their control on decision making and implementation. There is no reason why they should change the community need list if the whole process has been transparent. Rather there is a general perception that the adopted approach was an avenue to entertain lobbying, corruption and politicking. The whole process is not transparent as the local community or public are not aware of criteria used for the final selection of projects. The communities selected by the other two CDD agencies, CSDA and CBUDA approach allow the recipient communities to be in full control of decision making process and the implementation of all the three CDD projects while the agencies only supervise.

Furthermore, Community and Social Development (CSDA) and Community Based Urban Development Agencies officials are not involved in the procurement neither are they involved in the decisions on award of projects to contractors. However, Ministry of Community Development and Cooperative (MCDC) officials award all CDD projects to contractors and procure all construction materials. Botes and van Rensburg (2000), considered this interference as a paternalistic approach which is often used by development agencies or professionals. Most development experts in Akure prefer the use of top-down approach because it is what they are used to and are unwilling to allow the local communities to take total control and ownership of CDD projects. This

contradicts the true meaning of participatory development approach which gives power to the people and may also influence the hijacking of the CDD project by the elites as observed by Platteau (2004). The elite could be the wealthier members of the communities, politicians or even community leaders etc. It is therefore important to make the selection process open and transparent, it will reduce the power of the elite and will increase the success of the CDD initiatives.

5.5.1 What is the Role of the Local Government?

The Akure Local Government's involvement in the community development process is practically the same for all the CDD agencies. They assist many of the communities struggling to meet up the 10% or 20% project by paying their contributions. Likewise, at the local government level, there is a Local Government Review Committee (LGRC) comprising of eight members. The chairman of the LGRC committee is usually the director of social development while other members include: the tradition leader of the recipient community or his representative; two representatives of the community residents' association (a male and a female). Other LGRC members are four representatives of the community's youths; Head of Department of LGA community development and welfare department who assumes the role of the Local Government Desk Officer (LGDO). The LGRC works in partnership with all the CDD agencies to ensure the success of the CDD projects in their communities and at the completion of the projects, they take over the management, monitoring and evaluation of the project as explained by the chairman;

> *"The CDD projects is not exactly our projects so we really don't have much to say about the operation. Although we have been able to help some of our local communities by working with the CDD agencies. During the LGRC meetings, community leaders are expected to notify us of their needs even though we know we don't have the fund, we are aware of the needs. At the completion of the projects we then take over from the CDD agency to assist the local communities e.g. if it is a toilet or market project, we will appoint a cleaner to clean it. To encourage CBO's registration, we have made it free, before now they use to pay for this service […]"* ***(AKSLGA Chairman, GA: 1)***

The roles of the local government are limited to what is stipulated in the implementation structure (see **Figure 5.2**). It is important to highlight that any intending applicant must be registered with the local government, who will in turn issue a certificate of registration. Without this certificate the community's application will be rejected. This is increasing the importance and the effectiveness of the local government in grass-

root developments however many of the CBO are not aware that their registration will enhance the accessibility of government funding and assistance as one respondent explained;

> *"When did we start to register with the local government authority? I am hearing this for the first time and I have been a community leader for over five years! I have been to the local government severally to submit applications and to ask for help but nobody told me that we need to register. Maybe that is why MCDC did not approve our application, we just thought it was because we are suburban community. You see this is the problem with our government, they will not give you the required information rather they will be tossing you here and there [....]* **(Chairman, Alaba Layout, CL: 1)**

Another respondent commented that they are registered with the local government and have three pending applications with the Akure South Local Government (AKSLG) for over a year. They are yet to get any response from the local government and neither were they informed of the free registration.

> *"I was at the local government last week to check on our request for road project. I was only told that the chairman has not approved it because he was newly appointed and it may take some time for him to settle down. The officer told me that I might need to attach our certificate of registration and that I should give him N500 to expedite the issuance. I told him that I will have to inform my chairman and will get back to him. I was not informed that registration is now free or else I would have registered immediately! That is the problem with some of our public officers, they are only after monetary gain …* **(Chairman, Omoniyi Estate; CL: 12)**

The implication of lack of information can affect the trust the local community have in constituted authorities which invariably will affect their collaboration during the CDD process. It is important that all stakeholders particularly local communities understand the institutional framework used by development agencies which buttress Kopt and Craig (1998) opinion about the need for government agencies to be transparent with regard to matters of budget and accounting, government structure and function etc. Akintoye (2008), further stated that information on government activities should be readily accessible, timely, reliable and understandable. This will help the local communities and people generally to make informed decisions.

5.5.2 What is the Level of Community Involvement?

At the community level, each community must appoint five members as Community Project Management Committee (CPMC) which should include three female and one of them must be a signatory to the CPMC account. This is the approved standard for all communities undertaking financial supports for community driven projects implementation. The CPMC is in charge of every-decision making and are responsible for the formulation, facilitation, implementation and management of the CDD projects. They are trained in the use of participatory approach while the agencies provide fund and technical expertise. CPMC is expected to work with other subcommittees in matters such as project implementation committee; monitoring and evaluation; Operation and Maintenance Committees. CPMC is also in charge of the management of the community projects and are responsible for reporting any faults to the Local Government Review Committee. However, the maintenance and repairs are carried out by their respective local government authorities. It is the duty of the Community Project Management Committee (CPMC) to liaise with the CDD agencies and their Local Government Authorities.

Rather than use Community Project Management Committee (CPMC) like the World Bank agencies, MCDC employs and trains four members of each recipient communities called 'Change Champions, and they have the same responsibilities as CPMC. They went further to employ 99 youths and volunteers as 'Change Agents' who are indigenes of Ondo State in order to motivate community driven development initiatives at the grassroots within Ondo state. The change agents were trained to use participatory rural appraisal and sustainable livelihood approach which are the two techniques used by Ministry of Community Development and Cooperative's in conducting the needs assessments as explained by the community development officers;

> *"The government hope that in five years, these change agents would have been good in the use of participatory rural appraisals and many of them will be working in mainline ministries. This way we can have a transfer of knowledge and community participation will be popular. They are lucky because we did not have that opportunity….* ***(Community Development Officer, MCDC, GA: 13)***

The change agents were also equipped with necessary instruments needed to discharge their duties such as laptops, GPS devices, cameras, camcorders etc. Five change agents are usually required to liaise and assist the communities' residents to

identify and prioritize the infrastructure needs of the community. They usually live and interact with the local community members for two months before conducting the needs assessment exercise. This raises further question because having gone to this extent, why do MCDC officials still feel the need to change the community final need list? What then is the difference between MCDC and other conventional agencies? What is the difference between these two institutions and is there is any connection?

5.6 Key Institution versus CDD Agencies: What Is the Difference?

This section discussed the relationship between key government agencies, CDD agencies and other stakeholders. The CDD agencies are structured to be an improvement on the operations of the key institutions involved in public infrastructure delivery in Akure city. It is important to note the operation environments of the CDD agencies and the interpretation and meaning given to the area classifications by their respective officials. Community Based Urban Development Agency (CBUDA) is mandated to provide infrastructure facilities for urban areas of Akure city with particular focus on the poor inner city areas. While Community and Social Development Agency (CSDA) and Ministry of Community Development and Cooperative (MCDC) were equally mandated to meet the needs of the rural areas of Akure city and the entire Ondo state. This was interpreted to mean the remote rural settlements and communities as explained by the project officer for the agencies;

> *"[….] there are many communities and settlements in Ondo state that has no social amenities. The main aim of CSDA is to increase the access of rural urban dwellers to basic infrastructure, most especially the areas that has been long neglected especially those located far from urban centres and were also identified as poor rural area in the baseline study we conducted […]* ***(CSDA, G19)***

> *'[….] we prioritised the request we receive from CBOs and we only approve those from the remote rural communities excluding the major urban centres most especially those identified as rural area on the master plan ….]* ***(MCDC, GA 13)***

Another finding is the issue of the rural- urban dichotomy and it is a major issue in Akure city as it affects the distribution of infrastructure facilities and allocation of responsibilities to government agencies. Some areas are classified as urban areas due to the population density but their characteristics is still that of a rural area which is the case of the most of the selected communities in the case study. Aba-Oyo, Awule, Ijoka

and Omoniyi communities were farm settlements before they were converted to residential layouts. They were cocoa plantations which were converted into residential areas as Akure city expanded along major urban routes. Oyinloye (2013), study of geospatial analysis of urban growth in Akure city revealed that the surrounding agricultural land and villages located at the fringe of Akure city are being converted to urban residential land use without corresponding infrastructure provision.

Most of these settlement retained their initial characteristics, whereby some cocoa and plantain trees are still visible. Despite these characteristics and lack of basic amenities these layouts are regarded as urban areas by planners and government officials because of their proximity to the city centre and because Akure is a state capital. This close proximity of the suburban communities and the lack of clearer definition of urban-rural delineation is partly the reason for the neglect of the suburban area of Akure city by CDD agencies. The question then is who is responsible for the infrastructure provision in the suburban areas of Akure city? The Akure South Local Government Authority is therefore responsible for construction and maintenance of all community roads in the suburban areas of Akure except the government residential area. They also complement the provision of potable water.

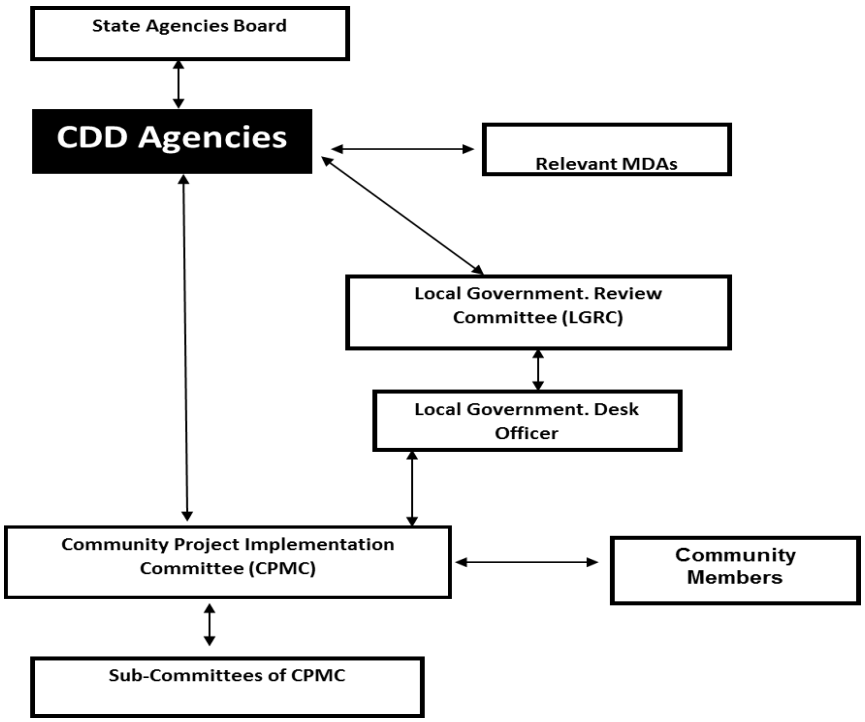

Figure 5. 3: Institutional Linkages between CDD Agencies and Other Key Agencies in Akure.
Source: CSDA Desk Record (2011)

The institutional framework of the CDD agencies requires that they collaborate with other key institutions, agencies, ministries or departments most especially the regulatory agencies as shown in Figure 5.3. The figure shows that both the CDD agencies and local governments are expected to interact with the CPMC while the CDD was supposed to collaborate with the key agencies (MDAs). There is provision for inter-relationships between the CDD agencies, key institutions, local governments and recipient's communities. Although the strategies for CDD agencies are quite different from those used by the key institutions, the CDD agencies are required to operate within the existing institutional structure. They are also expected to work together in partnership. There is a general consensus among participants of Academic focus group and the community leaders interviewed that there is only limited interaction between the CDD agencies and the local government while there is no exchange of information between the key institutions and the research institutes;

> *" …. Many of the government officials are professional colleagues and friend. We usually meet at professional conferences and association meetings. We do try to interact and share our concerns with them, most especially regarding the importance of an up to date master plan of Akure city. However, they are constrained by bureaucratic bottle necks and poor structure to receive assistance from the academic community. There are so many past studies and researches on Akure city but many of the outcomes are not implemented by the officials of government agencies. They think that they don't have the power to enforce the cooperation between government agencies and the academic communities. It is possible because there are joint researches between universities and Ministry of Agriculture, this is an important process in developed countries that is lacking in Nigeria…. **(Academic Focus Group, FGD 4:1)***

The CDD agencies have mutual collaboration with the local government authorities only because they are required to work with the local governments' authorities as well as recipient communities as shown in Figure 5.2. There is no co-operation between key agencies. This lack of information sharing could affect the efficiency of these agencies and the adequacy of infrastructure delivery within the case study. The information gathered during the needs assessments of local communities are only accessible to the CDD agencies, they are not shared with the key government agencies. Each institution plans, designs and implements all the infrastructure projects without any input from the key agencies. There is no collaboration between the agencies which could result into either multiplicity of efforts or underperformance. All the agencies primarily have similar function and overlapping roles or function which are unregulated.

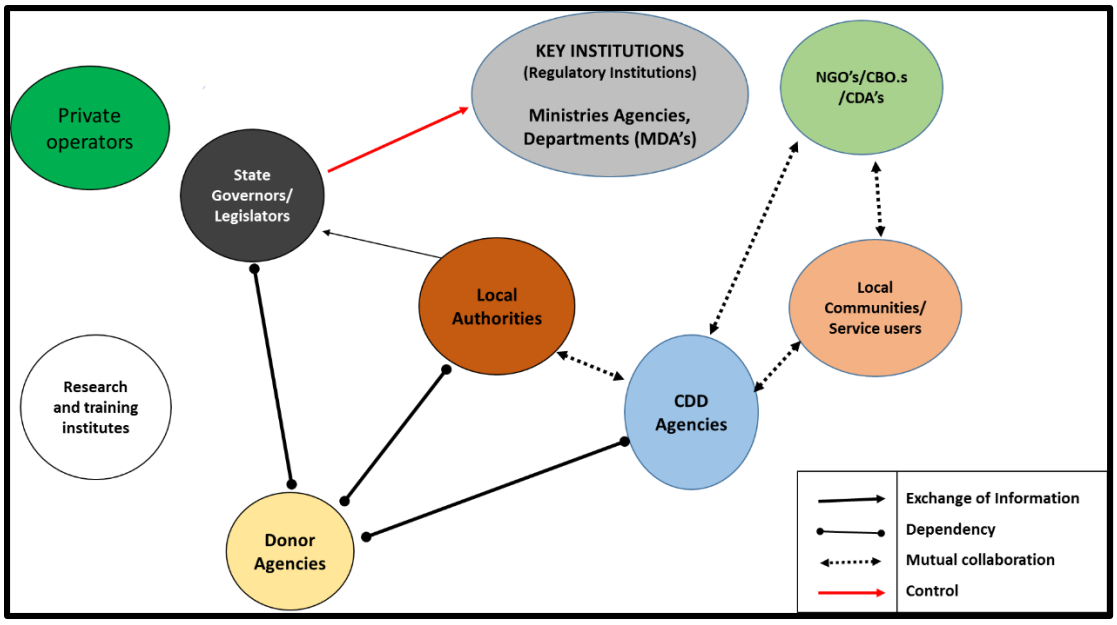

Figure 5.4: Existing Relationship between Stakeholders in Akure City

Road and water projects are on-site networks which Choguill (1996a) considered as long lived engineering structures and network. They involved the laying of underground pipes for water supply and drains for waste water disposals. These often require digging and should have been planned during the designing of road networks and to do this successfully will require the collaboration of all the agencies involved in the delivery of the facilities. The institutional framework for a participatory approach encompasses all stakeholders including government agencies, the levels of government and the private operators. Presently there are multiple agencies involved in the provision of road and water infrastructure in Akure suburban areas. Each agency takes directives from the state government and supply infrastructure based on budget allocations and how much they are able to achieve depends largely on how soon budget allocations are dispensed. It is important to coordinate the activities of each agency for effective distribution of infrastructure development. At present this is lacking as shown in Figure 5.4.

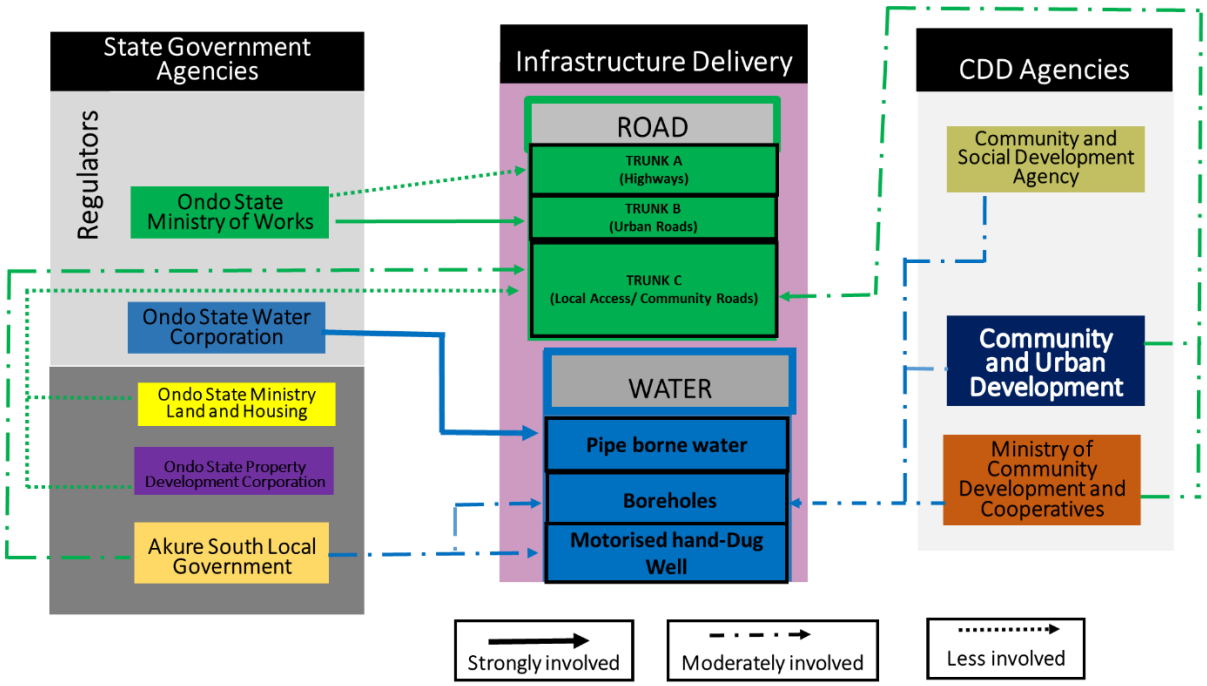

Figure 5. 5: Infrastructure Delivery in Akure City.

Figure 5.5 above shows the level of involvement of each government agency in the delivery of infrastructure development in Akure city. The key institutions are strongly involved in infrastructure delivery while the CDD agencies are moderately involved as a result of the huge responsibility and large areas of coverage. Likewise, Akure South Local Government Authority is struggling with meeting its responsibilities due to financial inability and inadequate staff. Although Nigerian Local Governments were created to be autonomous, however their budgets and activities, most especially capital projects are being controlled by the state governments and the legislatives. They also rely on grants from the state government apart from federal allocation.

In such cases, where lies the financial autonomy of local government authorities which require every local government to have absolute right over their administration. Olurankinse and Rotimi (2014) is of the opinion that the autonomy of local government authority in Nigeria is more of a myth than reality and that they lack the requisite financial independence to meet the imperative responsibilities of providing basic infrastructure needs. They have huge responsibilities because they are closest to the local people. They are to collaborate with the communities in evaluating, prioritizing and realising specific needs. There is also no corresponding financial capability to carry out most of their public responsibility as shown in figure 5.6 below. No wonder Nigerian

infrastructure development is plagued with inefficiency associated with public domination of infrastructures provision, this explains why AKSLG is simply moderately involved in the delivery of infrastructure provision in Akure.

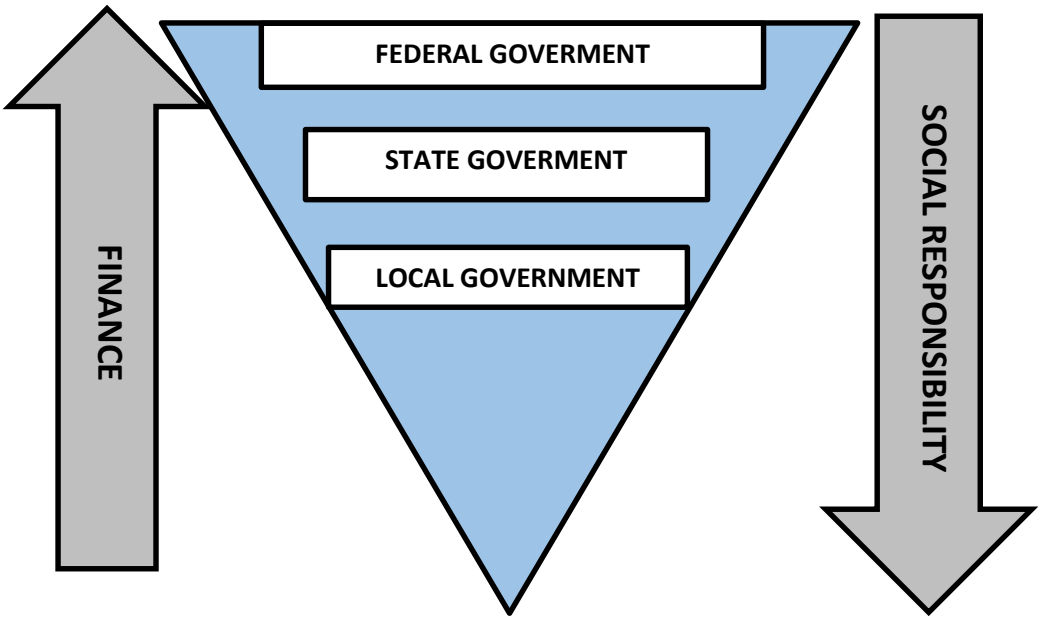

Figure 5.6: Levels of Government and Direction of Social Responsibility.

There is need for unbundling of the functions of key institutions and restructuring of the institutional framework in order to improve capability of key development agencies and efficiency of delivery and management of infrastructure development. It is important that there is a clear definition of roles and operation environments in order to avoid overlapping mandates and fragmentation of responsibilities. The process and strategies is discussed in the next section.

5.7 Process and Strategies of Public Infrastructural Provision in Akure

Infrastructure development covers a broad range of facilities and services involving different providers such as public, private and community sectors. The regulatory framework for road and water infrastructure development policies in Nigeria was reviewed in detail in chapter 3. The chapter revealed the preference for the master plan as the guide for most infrastructure developments in many cities in Nigeria including the case study area. A Master Plan usually have a life span of 20 years from the date of inception. The Akure Master Plan which was established in 1980 and it expired in 2000 but it is still being used by all the development agencies and the

planning authorities in Akure city. As this situation is not peculiar to Akure city alone it necessitated the Federal Government of Nigeria to institute a National Integrated Infrastructure Master Plan (NIIMP) with a 30-year horizon from 2014-2043. This was a strategic plan in unifying the master plan of all the states in Nigeria and a way of achieving the country's vision 20: 20 of ensuring Nigeria achieved 70% of its infrastructure development plans among the top 20 developed countries with adequate infrastructure by the year 2020 (NPC, 2013). Each state is required to formulate a strategic plan for the infrastructure development within their states. However, during the data collection there was no State Integrated Infrastructure Master Plan (NIIMP) and two years after the inception of the NIIMP policy, Ondo State Government is yet to review the expired Akure City Master Plan in line with the policy;

> *"Government have plans for the review of Akure City Master Plan but we are yet to start. Master Plan Committee was constituted in 2009 which I am a member but we are yet to start the actual review. We are also supposed to formulate planning strategy for infrastructure development in Akure and many urban centers in Ondo State. Currently we are still using the old Master Plan for planning purposes in…"* ***(Director of Development and Planning, GA: 10)***

In a bid to address lack of development plans, the Ondo State Economic Empowerment and Development Strategy (ODSEEDS) was established in 2004 as a guide and a way of mobilizing resources for accelerated development. The policy was a derivative of the National Economic Empowerment Development Strategy and was supported by United Nations Development Programme (UNDP) although its implementation has been questioned.

> *"We were consulted when the ODSEED policy was been formulated but we later found out that most of our suggestion was not implemented. Some projects dragged on till the policy itself expired just because there was no proper structure for monitoring. We also suggested that there should be a structure for public complaint, but this was disregarded. We are in the built environment and we know the importance of public participation……* ***(Academic Focus Group, FG4: 1)***

ODSEEDS was established to promote local participation and reorientation of development agencies. However, it failed to provide a structure for the implementation and also neglected public complaints even though the policy prioritized infrastructure development as pre-requisite for promoting economic growth and private sector's

investments. The ODSEED policy was a 5-year development plan initially designed to be executed between the year 2005 and 2008 and was further extended till 2010 in order to allow the completion of on-going infrastructure projects. However due to change of government in 2009, the implementation of the ODSEED policy was suspended. The new State Governor belonged to a different political party from his predecessor and therefore had a different manifesto and agenda. The infrastructure projects were later continued and there was no further extension or reviewing of the policy but just like the Akure Master Plan, at data collection, the policy was still being used as the framework for infrastructure development in Akure city simply because many of the projects were uncompleted.

This means that Akure city is expanding without any articulated and organized development plans except for uncoordinated residential layout plans submitted by individuals, families and communities to planning authority. Other alternative measure used to determine the quantity of road and water projects apart from budget allocation includes electoral promises and request from individuals, communities or organizations as explained by Chief Resident Engineer;

> *"…a development plan will assist us in discharging our duties and may also reduce pressure and influences from politicians because we have political project lists aside the capital projects. The Commissioner for Ministry of Works is a political post and he often approves projects request from political party leaders which we consider as 'chairman's list', we have no choice but to execute the projects. This list usually includes projects approved by the state governor which are promises made during election campaigns and requests from political affiliates……* ***(Chief Resident Engineer (OSMW, GA: 6)***

Although it is the responsibility of officials of development agencies to implement any strategic development plan for infrastructure development in Akure city, they are constrained by political factors and the political environment. Political environment provides opportunities for improvement of infrastructure sector as many international donors prefer to collaborate with democratically elected governments as it considered to be stable. However it also promotes lobbying groups comprising of government officials, individuals or organizations in the society (Kotler and Armstrong, 2006). These groups often have direct influence on promulgation and implementation of policies. They also have influence the infrastructure sector in any country just as the creation of capital, management, strategic planning, globalization and sustainability. In

addition, these lobbying groups also influence the decisions of government officials and development expert in executing development policies and plans. Yeo (1995) and Aribigbola (2013) assert that a good strategic development planning process depends on the capacity of the planners and decision makers to make clearly defined objectives with provision for sustainable alternatives schemes.

Also the approach employed by the government officials is important as it affects the actualization and success of the projects just as source of finance. Table 5.5 shows the approaches adopted by development agencies in Akure city. Most of the government agencies preferred top-down approach where all the decisions and implementation are carried out by development expert. It comprises of chains of commands and processes which often start with the state governors down to the development agencies. The same practice is transferred to the implementation of infrastructure development projects. The government officials make all the decision right from the planning stage to the implementation where the projects are carried out by private contractors in some cases by direct labour.

Table 5. 5: Approaches of Government Agencies

S/N	NAME OF AGENCY	Source of finance	Approach
1	Akure South Local Government	• Federal Allocation	Top – down
		• World Bank	Bottom-up
2	Ondo State Ministry of Works	Budget	Top – down
4	Ondo State Water Corporation	Budget	Top – down
5	Ondo State Ministry of Physical Planning and Urban Development	Budget	Top-down
6	Ondo State Ministry of Land and Housing Services	Budget	Top – down
7	Ondo State Property Development Corporation	Budget	Top – down
8	Ondo State Community and Social Development Agency (CSDA)	• State Government Grants • World Bank grants	Bottom-up
9	Ondo State Community Based Urban Development Projects (CBUDP)	• State Government Grants • World Bank grants	Bottom-up (1st, 2nd, 3rd projects)
10	Ondo State Ministry of Community Development and Cooperative (MCDC)	Budget	Top-down (1st project) Bottom-up (2nd & 3rd projects

The top-down approach is a well-tested and established approach that is widely embraced by the key government agencies and it is a reflection of the type of governance in Nigeria. It is a traditional model that is widely practiced especially where

the funding for the projects is centrally controlled as shown in table 5.5. The process of dissemination of information and instructions on the actual number of infrastructure projects and funding is a top-down process. Directives are passed to the key institutions right from the state governors and the legislative as illustrated in Figure 5.7. The whole process of infrastructure developments begins with capital budgets which are approved by legislators, costed by the budget and price monitoring units, it's a chain of instructions being handed down as explained by an official of the Ondo State Ministry of Works.

> *"We are civil servant and we must obey the instructions given by our superiors. We make little input into the number of projects as it all depends on the availability of funding and the directive from state governor and the legislators. We make all the decisions and implementation while the local communities are not involved in the process, although because of the technicality required and the number of people affected by road projects, it is easier and cheaper. Community members do complain to us because many of us live in these same suburban communities but there is nothing we can do to improve the whole process……"* **(OSMW, GA: 6)**

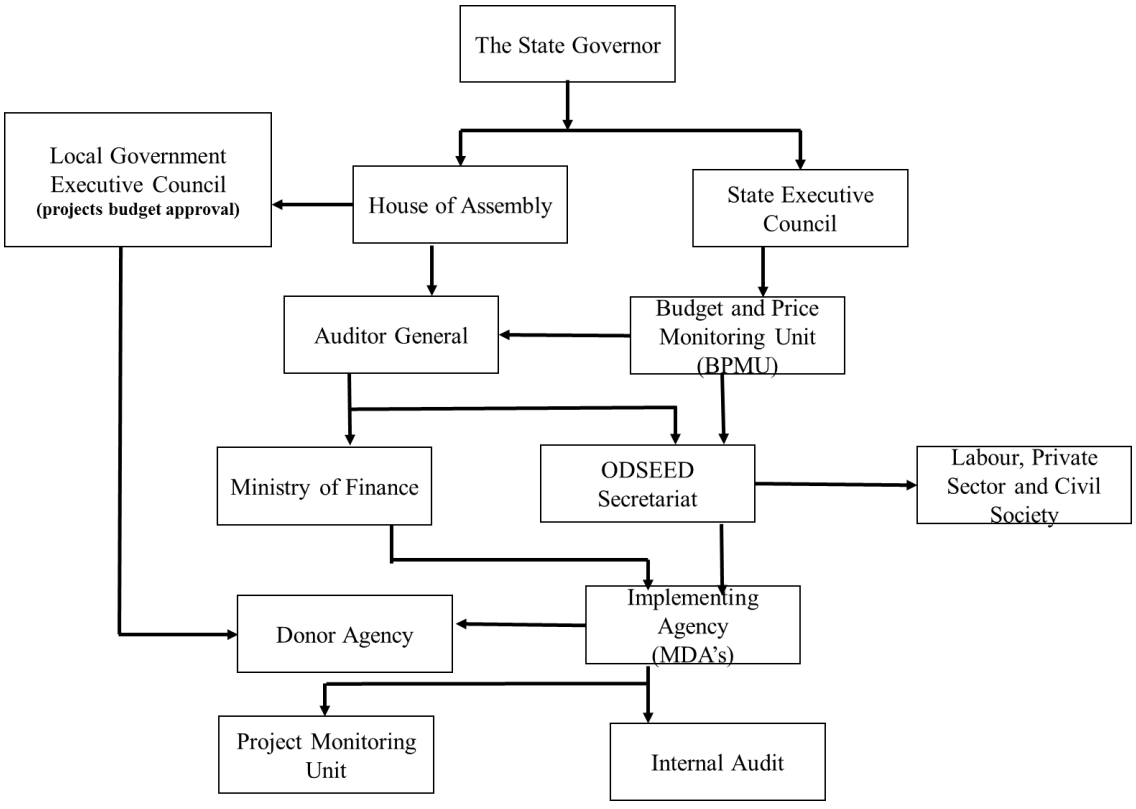

Figure 5.7: Infrastructure Implementation, Project Monitoring and Evaluation Process.
Sources: OSMW Desk Record (2011)

Akure South Local Government's capital expenditure is controlled to a large extent by the state government. Every capital expenditure including infrastructure projects that is above one million naira (£4,785) must be approved by the state government through the house of Assembly i.e. the state legislative. Also until the election of April 2015, the local government was administered by different caretaker committees for the past five years. These are political appointees selected by the state governor and approved by the legislative (House of Assembly). The chairmen of the committees are often changed at will and this affects the continuity of projects and the loyalty of Akure South Local Government's staff. Likewise, the Local government has no control of the recruitment and discipline of staff even though they pay staff salary, this is designated to another agency; Local Government Service Commission. This agency is responsible for recruiting, promoting or discipline of local government staff. This affects the level of performances of local government staff as the management staff have little or no direct control over their staff (Olurankinse, 2011). Also there is undue external control and interference with the operations and management of the local government finances by the state government even though local governments in Nigeria are supposed to be autonomous as explained by the Director of Works Department;

> "*Our operations are strongly affected by the political environment because within the last 3 years the chairman of the local government has been changed five times. It often leads to conflicts of interest and it is time consuming sometimes some projects are discontinued because the chairman may have his preference. We operated better when we had an elected leader because then we know we are working with such an individual for the next five (5) years****……. (Director of Works & Services (AKSLG, GA: 2)****.*

The frequency of change meant new policies, interest and discontinuity especially with no development plans guiding infrastructure provision by the Local Government. Each local government in Nigeria is supposed to establish Local Economic Empowerment Development Strategy just like the state and federal levels of government. This should have eradicated the problem of discontinuity as each appointed leader would have had to continue with any ongoing projects. The effect of the above is that the dire infrastructure needs of the community is either placed on hold or stopped altogether every time a new leader is appointed.

On the other hand, with the CDD agencies, the process of infrastructure developments starts with the local communities who are the intended service users as revealed in

Figure 5.8 below. Each selected community is expected to plan and implement three community driven projects in order of priority. They make the decisions, the costing, and the actual implementation under the guidance of officials of the CDD agencies. Although there is an exception with Ministry of Community Development and Cooperative, the first project is executed entirely by the officials of the ministry as a learning process for the community leaders (CPMC) as shown in the table 5.4 above. Furthermore, the final selection of MCDC's three CDD projects are made by the officials of Ministry of Community Development and Cooperative (MCDC) agencies in their offices. This contradicts the fundamentals of community driven developments and participatory development model as explained by the project office below;

> *"We are introducing the community to a new way of carrying out infrastructure development which is beyond the depth of most of the local community members. The first CDD project is a learning process for members of the development committees and a trust building project to reassure Akure residents that government can still provide basic amenities… (***MCDC, GA: 13)**

Indeed, infrastructure project is a set of activities that involves quantifiable cost, time limited activities and budgets. Beyond just meeting local needs, it is considered more practical which is why some author find it difficult to advance the empowerment approach within the framework of development projects despite it being a major objective of participatory development (Eyburn and Ladbury, 1995; Cleaver and Kaare, 1998). As right as this assertion might seem the final decision and selection of Community Driven Development (CDD) projects from the need assessment list should remain the obligation of the local community. Why change the list and why should the final selection of CDD projects implemented be done by the officials of Ministry of Community Development and Cooperative? It shows the over reliance on top-down approach and administrative bottle necks that is prevalent within the traditional development agency. The other two development agencies CSDA and CBUDP allow local communities to choose their community projects. This is what Cleaver (2001) considered as paradoxes of participatory approach to development especially regarding the role of development institutions.

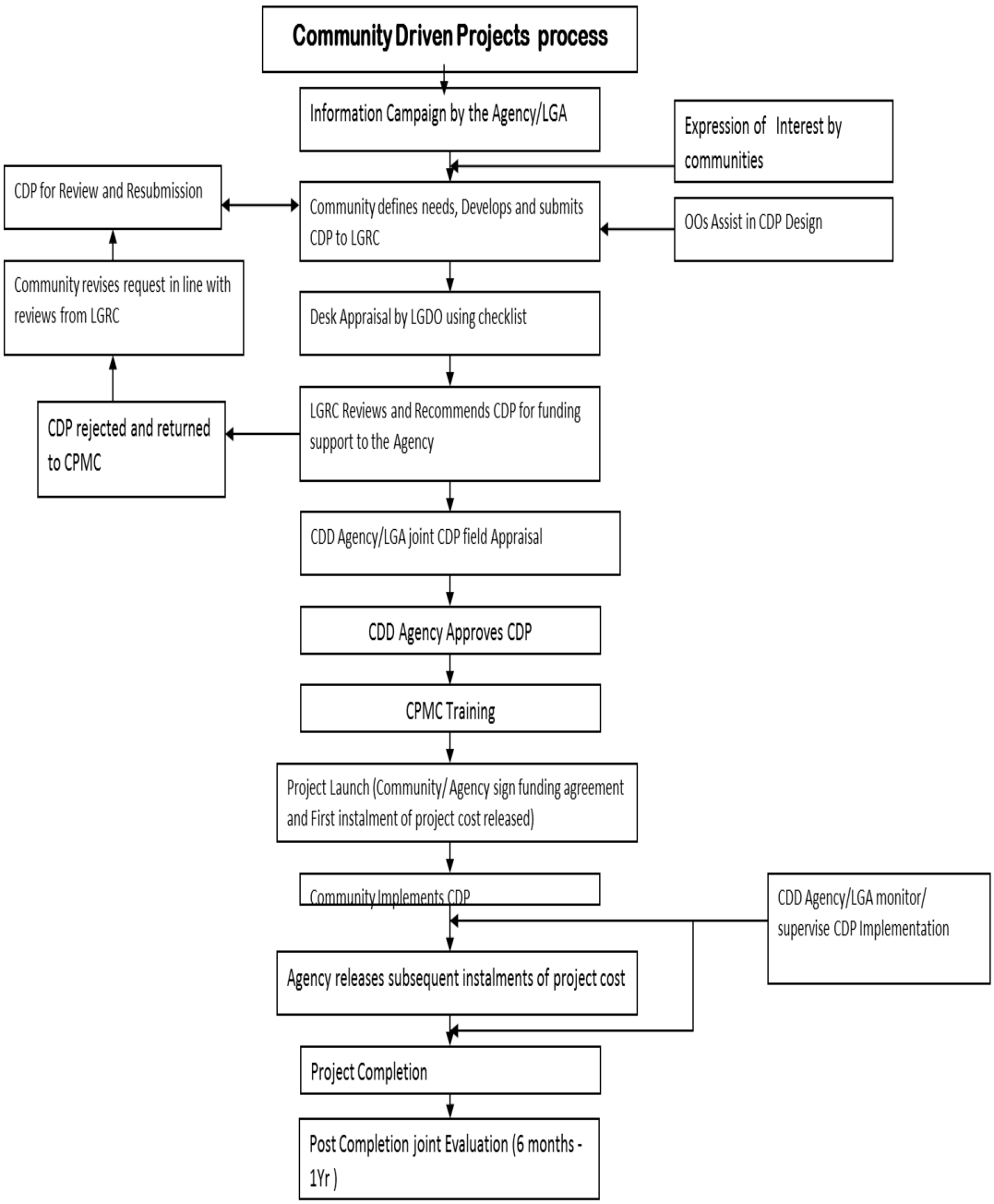

Figure 5.8: Process of Community Driven Development Projects.
Source: CSDA Desk Record (2011)

The study further reveals that the use of multi-organisation approach and lack of collaboration and control of activities of key institutions affect the qualities of public infrastructure provision in the Akure city. Most of the agencies operate in isolation apart from the CDD agencies which has limited interaction with the local government as shown in Figure 5.9. There is no interaction between the regulators and other agencies providing road and water infrastructure. The state-based agencies in charge of

regulating the provision are also involved in the delivery of infrastructure. This results is conflicts of roles and duties as more attention is been paid to delivery of infrastructure than regulation of activities of other agencies. There is need for separation of roles and effective monitoring of public provision in order to ensure even distribution.

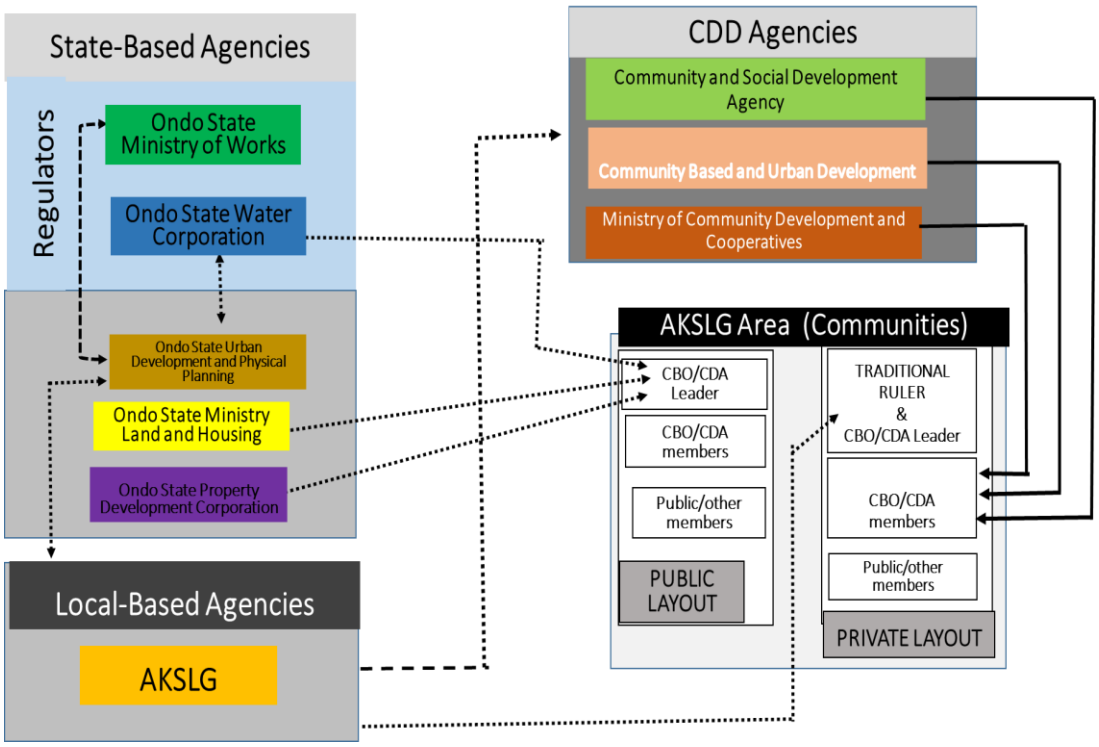

Figure 5. 9: Collaboration between Key Government Agencies and Local Communities.

Furthermore, the institutional framework for both key institutions and the CDD agencies does not give room for public complains. The procedures for dissemination of information about projects are usually done through advertisement of contracts in newspapers, radio and television as well as display on notice boards. There is no appropriate measure for handling public complaints except in few circumstances where aggrieved public member file a lawsuit which however is not very common as it is consider a waste of time and it is expensive. The issue of 'overriding public interest' in the Nigerian land use Act of 1978 may be responsible for the lack of public complaint about any project or development even where their right is infringed upon. Section 1 of the Land Use Act provide the state government or their representative the right to acquire, use or occupy any land or property for public purpose. They have the power to revoke the right of occupancy for an overriding public interest as long as a notice of revocation is served as required by law upon which any title of a holder of the right of

occupancy shall be extinguished. The development of road and water projects sometimes require revocation land title and this is a common ground for public complaint as the state government can only pay compensation where there is a statutory right of occupancy.

Infrastructure development is a time framed activity which could be affected by many factors such as political and economic environment. To achieve any progress in the planning and development of infrastructure, there is need for continuity of policies that are good or provides best alternatives that give preference to continuity irrespective of political affiliation. Planning over a long period of time does set good background for sustainable institutional framework but the frequent changes in government which Nigerian is known for is a major hindrance to planning process in Akure city. In assessing the provision of public infrastructure within the suburban areas of Akure city, the ODSEEDS policy will be used as a benchmark. Lastly finance is regarded as the vehicle of any development plan as the success or failure of any development project depends on continuous availability of funding. The source and funding will be discussed in the next chapter.

5.8 Chapter Summary

In this chapter, the institutional framework for infrastructure provision in the selected communities in Akure suburban areas was examined. The examination revealed the dominance of public agencies and the use of multi-organization and sectoral approach. There are nine agencies in charge of the provision of public infrastructure in the study area and each agency is autonomous. The chapter also revealed the issue of overlapping responsibilities as the key institution responsible for regulating other government agencies are also the major providers of the provision of road and water infrastructure in Akure suburban area. The study also showed the key government agencies preference of top-down approach to infrastructure development as only the three CDD agencies make use of bottom-up approach.

The institutional framework for key agencies did not promote collaboration among the agency as each agency have separate source of finance and relate directly with state government instead of the regulatory agency. There is also no exchange of information between the CDD agencies and the regulating agencies. This could be limiting their performance and the discharge of their duty as regulator. The study further revealed

there is no specific mechanism for addressing public complaints except for a law suit which could be expensive and beyond the capacity of local communities. The next chapter will assess contribution of government infrastructure to adequacy of infrastructure in Akure sub urban area between 2007 and 2011.

Chapter 6. Public Infrastructure Provision

6.1 Introduction

The previous chapter investigated the responsibility of government agencies that regulate and provide road and water infrastructures in Akure. It also examined the strategies employed, and the process and relationship between these agencies. The investigation revealed the preference for top-down approach by all the key agencies except the community driven agencies which adopted participatory development (bottom-up) approach. This chapter examines the outcomes of government provisions in the study area in order to assess whether the technocratic top-down approach and government initiated community driven development programmes deliver adequate infrastructure. The chapter also assesses the sources of finance for each of the agencies involved in road and water infrastructure development. No matter how good an institutional framework or strategies employed by government agencies, without constant source of finance, the outcome will be hampered. Data analyzed were gathered from the interview of key government officials, the documents and desk record of government agencies and focus group discussions.

6.2 Sources of Funding for Public Infrastructures Projects in Akure

Institutional framework involves agencies, legislative and decision-making procedures as well as budget mechanisms (Lowndes, 2010). Budget allocations have been the major source of finance for public infrastructure for both state-based agencies and local-based agencies in Akure city. Budget allocations are often used by the state government to show the priority of the state every fiscal year, therefore government allocates funds based on perceived priorities at any particular period (Olurankinse, 2011).

6.2.1 State-based Development Agencies

Ondo state government's overall budgets are based on estimated accruable revenues. More than half of these revenues are statutory allocations from the National purse while the remaining are internally generated from taxes and 13 per cent derivation fund from crude oil exploration. The funding of infrastructure developments in Akure city is from three sources which are; budget allocations, grants from the state government and financial assistance from international organisations. These funds are channelled through the Commissioners and Directors who lead the operations of each agency.

Part of the objectives of the ODSEEDS policy was to encourage private sector investment in infrastructure development in the state at the end of 2008. **Table 6.1** shows the budget allocation for key agencies involved in road and water infrastructure.

Table 6. 1: Budget Allocations for State-Based Agencies in 2007 - 2012.

Agency	2007 (£)	2008 (£)	2009 (£)	2010 (£)	2011 (£)	2012 (£)
Ondo State Water Corporation (OSWC)	1,676,053	1,913,872	2,478,468	16,550,239	21,688,995	19,138,755
Ondo State Ministry of Works (OSMW)	181,021	119,299	985,276	56,641,148	1,138,755	7,655,5023
Ondo State Ministry of Lands and Housing (OSLH)	88,119	149,331	5,673,178	12,047,846	966,507	33,492,822 .
Ondo State Ministry of Physical Planning and Urban Development (OSMPPUD)	-	3,084,861	3,086,124	6,258,373	454,545	29,569,378
Ondo State Development and Property Corporation (OSDPC)	270,610	408,216	69,407	3,339,712	2,291,866	645,933

Source: Ondo State Ministry of Economic Planning and Budget, 2011

Table 6.1 shows that Ondo State Ministry of Physical Planning and Urban Development (OSMPPUD) did not have any allocation for 2008. It was formerly a department in the old Ministry of Works, Land and Housing, but with the separation of functions funds were allocated to the agency separately as shown in Table 6.1. Furthermore, there was a significant increase in the capital budget for Ondo State Ministry of Works (OSMW) in 2010 because the focus of the state government was rehabilitation of road networks. Ministry of Works had the highest budget of £56.6 million which was meant for the improvement of the quality of urban road network and the upgrading of major roads within the city centre from single to double lanes. The increase was also due to political factors as road construction was a major point in the election manifesto of the state governor in his 2007 campaign. A participant of the academic focus group reiterates that the governor's re-election to office in 2012 hinged on the fulfilment of his promise.

> *"…. the present government is constructing so many road projects within Akure city, the question is why wait till now? We all know they are rushing the projects because of the election that is coming up next year and that is why more funds is being allocated to road projects. …* ***(Academics,*** **FG4:1)**

Incumbent governments are often known to give last minute grants to the state-based agencies in order to enable the completion of pending projects and to swing votes. Bajar and Rajeev (2015), asserted that increases in the funding of infrastructure provision is more prominent before re-elections as funds are allocated to certain regions to increase votes. Table 6.2 below shows additional grants by the state government to agencies responsible for water infrastructure. This shows the commitment of the state government to the improvement of water provision and further confirms water provision as the priority of the state government between 2009 and 2011. It also revealed the role that politics often plays in the increase in provision of certain infrastructure. Part of the electoral commitment of the state government was to provide public mains water supply in order to increase access to good drinking water. As a result, Ondo State Water Corporation was given grants to refurbish all the major dams and reservoirs in the state. However, the drilling of boreholes was later adopted as an alternative. The target of the state government was to ensure that each community in Akure city has a functional borehole supplying drinking water to residents as explained by the project supervisor below;

> *"…. Most of the water pipe networks are damaged and need replacement but it's difficult, expensive and time consuming because of Akure terrain. It is cheaper to install boreholes since it's an onsite projects and much easier to finish than pipe connections that is running through so many communities…"*
> **(Project Supervisor; OSWC, GA: 20)**

Table 6.2: Ondo State Grants to State-Based Agencies

Agency	**2009 (£)**	**2010 (£)**	**2011 (£)**	**2012 (£)**
Ondo state Property and Development. Corporation	303,030	331,313	363,636	545,454
Ondo state Water Corporation	1,635, 111	1,636,363	1,636,363	2,941,414

Source: Ministry of Economic Planning and Budget, (2011)

Table 6. 3: Budget Allocations for the Community Driven Development (CDD) Agencies.

Agency	2007 (£)	2008 (£)	2009 (£)	2010 (£)	2011 (£)	2012 (£)
Community Based Urban Development Projects	44,454	20,095	13,679	4,239,234	62,200	765,550
Ministry of Community Development and Cooperative	-	-	1,722,488	9,818,181	674,641	9,569,377
Community Social Development Agency	-	-	n/a	n/a	38,277	38,277

Source: Ministry of Economic Planning and Budget, (2011)

Furthermore, Table 6.3 shows the budget estimates for each Community Driven Development (CDD) agencies in addition to the financial grants given by World Bank to Community Based Urban Development Projects and Community Social Development Agencies. Community Based Urban Development Projects were scheduled to end in 2008 but were extended till 2012 due to the success of the projects in the urban area of Akure city- other projects were also initiated in other urban centres in Ondo state;

> *We were wrapping up the urban projects in Akure but the state government decided to extend our tenure beyond 2012 because they decided to upgrade Ore town to an urban area and also embark on couple of community projects. This is because Ore has grown to become centre of trade and commerce a most especially transportation business. We are presently conducting the baseline survey of Ore town […]* **(Project Development Officer (CBUDA, GA: 15)**

Table 6.3 further reveals that the Ministry of Community Development and Cooperative had the highest budget because the projects are solely sponsored by the state government. The Ministry of Community Development and Cooperative allocation was less in 2009 because it was only involved in institutional capacity training of staff while the implementation of CDD projects began in 2010. On the other hand, Community and Social Development Agency had the lowest overall allocation because the state government initially gave the agency the sum of $180 million (£232, 048,472) at the commencement of its programmes as shown in table 6.4 below. Community and Social Development Agency also has access to World Bank funding of about $200 million (£248,663.434) grants which was guaranteed by the Federal Government while the recipient communities contributed ₦80,190, 398 (£324,001).

Table 6. 4: Sources of Fund for (CSDA) and (CBUDA) Projects

S/N	STAKEHOLDERS	CSDA ($)	CBDUP ($)
1.	World Bank Credits	200 million	16.1 million
2.	State Government	180 million	1.8 million
3.	Local Government Authorities	10% of total cost of project (where local communities cannot pay)	10% of total cost of project (where local communities cannot pay)
4.	Communities	10% of total cost of project	10% of total cost of project

Source: Record of CSDA and CBUDA) Agencies, 2011.

6.2.2 Local-Based Development Agency

Table 6.5 shows Akure South Local Government (AKSLG) annual budget allocation and the proportion of actual spending on infrastructure projects between 2008 and 2012. The table reveals the percentages of annual spending, the differences between the budgeted allocation and the actual expenditure for the period covered.

Table 6.5: Budget Allocation and Actual Project Spending by AKSLG

Years	Budgeted Allocation (BA) (₦)	Actual Expenditure (AS) (₦)	Difference (BA-AS) (₦)	Percentage AS/BA
2008	151,300,000	57,735,386	93,564,614	38.2
2009	175,300,000	13,527,491	161,772,509	7.7
2010	180,926,800	26,547,600	154,379,200	14.7
2011	271,390,208	39,821,400	231,568,808	14.7
2012	407,085,300	159,723,100	247,362,200	39.2
Total	1,186,002,308	197,358,977	988,643,331	16.6

Source: FGN Annual Financial Statement 2008-2012, Olurankinse (2012) and author's computation

There is a steady increase in the budget allocations while the actual spending on capital project fluctuates and are all below 40% for all the year. An official of the local government confirmed that the low expenditure on infrastructure was attributed to huge capital outlay on payment of staff salary (83%) while only 17% was on projects;

> *"In as much as we want to embark on so many projects we also value the welfare of our staff which is our first priority. After the payment of salary from the FGN allocation there is not much we left. That is why we can only do road surface grading or at most gravel covered road …"* **(AKSLG, GA: 1)**

The highest percentages of annual spending on infrastructure projects was recorded in year 2012 (39.2%) and 2008 (38.2%) chiefly because both were election years. The political environments in Nigeria to a great extent has resultant effect on government performances and outcomes of infrastructure projects. Allocation of resources is largely determined by election terms instead of development policy. The absence of a development policy means funds is allocated at the discretion of government officials. At the time of data collection, it is impossible to assess AKSLG expenditure for each infrastructure sector as the breakdown of spending was not yet released. Similarly, Olurankinse (2012) is of the views that lack of adequate data on public sector spending in Nigeria is a reflection of the political and economic environment resulting from the absence of fiscal transparency and probity in the management of government finances. Despite the steady increase in budget allocation, annual spending was still lower than 50% of budget allocation while there were no revenue records for the payment of tenement rate;

> *"We rely majorly on the subvention from the Federal Government of Nigeria for most of our projects. We have not been able to enforce the tenement rate in Akure as is expected of us. Most house owners or renters refuses to pay it and we have been unable to prosecute offenders too because we know these facilities are not available" …. **(AKSLG* Chairman (GA: 1)**

The lack of adequate finance for Akure South Local Government can be attributed to the failure of the local government to effectively appropriate the tenement rate law as a source of revenue for capital projects. Local governments in Nigeria were granted the power to collect tenement rates on developed buildings within their jurisdiction. This rate is paid by the property owner even where the property is unoccupied. Presently in Nigeria it is only local governments in Lagos state and Abuja FCT that have been successful in the collection of tenement rate. There is resistance to paying this as most Nigerians do not see the justification for paying for services that are not available. The refusal of most Nigerians to pay the tenement rates and any other land use rates is not limited to the local government authorities alone. Occupiers of government housing or allottees of public lands in Akure city are required to pay annual ground rents to the state government however most of them fail to pay the annual

ground rent even when a demand notice is issued due to lack of infrastructure facilities within these estates and lack of trust in the government.

Investigation on the source of finance for infrastructure provision in Akure city established fragmentation of responsibilities between agencies in order to increase access to infrastructure development. Each of these agencies is provided with the financial means to discharge their duties which in turn should translate to improved quality and increase availability and accessibility. Obviously, with numerous agencies, there is always the issue of co-ordination. Who coordinates the activities of these agencies? Flyvbjerg (1998), explained that the successful completion of multi-organisational projects often involves a very high degree of coordination and unity of purpose most especially at the management level. The regulatory agencies that are supposed to be in charge are also the delivery agencies and this may lead to clash of role which is why it is advisable to separate the role of the regulator and provider. There are also tendencies for both the state-based and local-based agencies to compete rather than to co-operate with each other which could make co-ordination between rival agencies difficult. Multi-organisation approach where not managed often leads to ambiguity, conflict, and lack of common purpose. Despite the predetermined objectives and strict surveillance, control has always been extremely difficult to achieve (Stinchcombe and Heimer, 1985; Hamzah, 2010).

In term of decentralisation, this approach does not really provide much flexibility because the central government still has strong control over state-based and local-based agencies. They all depend largely on statutory allocation from the Federal Government of Nigeria. Likewise, the State Government also controls most of the local government's capital projects. It is very difficult to estimate the overall actual expenditure of the development agencies for road, water and electricity infrastructure in Akure city as a result of overlapping roles. This could result in overspending of public fund. There is also the issue of secrecy, suspicions and lack of information. Most government agencies do not release the actual expenditure on infrastructure to the public even when it is for research purposes making it more difficult to assess the performance of these agencies.

6.3 State-Based Public Infrastructure Provisions in Akure City

This section assesses the approach of each development agency to the provision of road and water infrastructure development in Akure. The levels of community involvement are also examined in order to assess if it has any influence on the outcome of the projects.

6.3.1 Road Infrastructure Projects

Road networks have a great impact on the growth of Akure city because they connect various communities and settlements. The total road network in Ondo State is made up of federal, state and local roads. 833.4 Km (10.23%) (Trunk A) of the total road network are federal highways; 1,716.9 Km (22.51%) are urban roads (trunk B) while the local road networks are 5,076.40 Km (66.56%). Only 161.8 km of the state road networks are paved with asphalt while 64.89 are graded earth roads and 441.1 km are surface dressed with gravel (ODSEEDS, 2004). The Ministry of Works is responsible for all urban road projects within Akure city including repairs and maintenance. Finances for these road projects mainly comes from budget allocations and grant.

ODSEED policy identified 52 road networks which needed upgrading, reconstruction and asphalt covering with a target completion by 2008. However, between 2007 and 2011, Ministry of Works received 198 requests for road construction and repairs from local communities in Akure city (see Figure 6.1). There is a gradual increase in demand for road infrastructure and the highest of 27% (53) was recorded in 2011 following significant increases in road project in 2010.

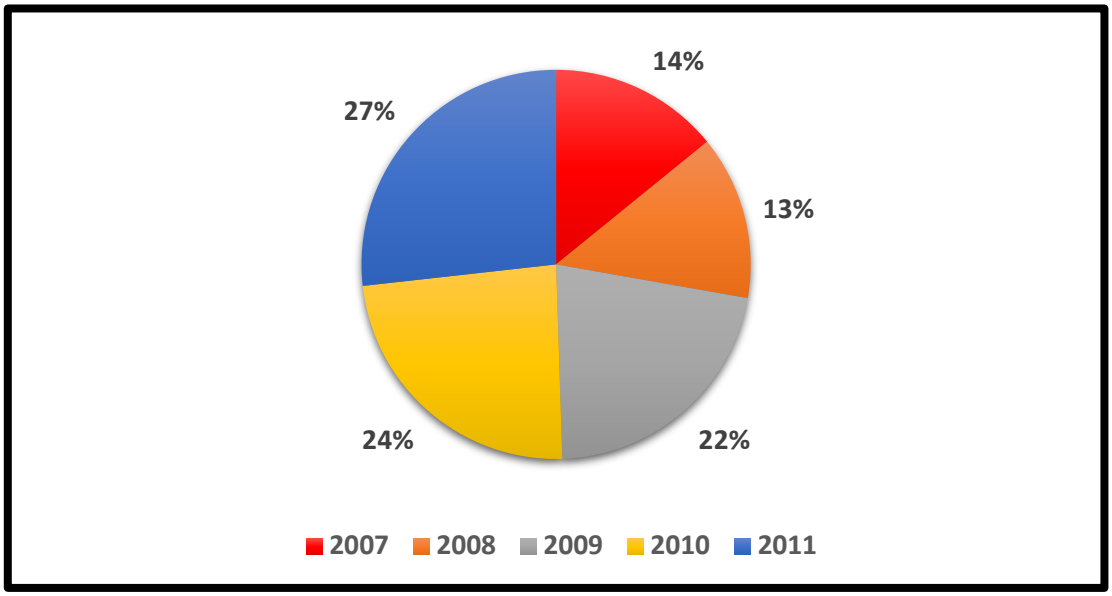

Figure 6.1: Request for OSMW Road Projects
Source: OSMW Desk Record, (2011)

OSMW officials do not consider individual requests except it is a request from other government agencies or institutions like hospitals and schools etc. Ministry of Works occasionally repairs other classified roads especially where a federal highway road condition poses a threat to life. This is explained by the Director of Operations;

> "*……in 2010 the state government adopted 'zero tolerance' for potholes and OSMW was instructed to repair major road within the state including those classified as federal roads. The State Government decided to repair some federal road because of multiple car accident causing loss of lives. The Akure section of the Ilesha-Owo highway has various potholes causing road accidents when vehicles ran into them particularly at night. Just last week 14 lives were lost when a bus ran into a ditch at the junction of Omoniyi layout. The Akure section of this road ran through the suburban area of Akure city and to forestall reoccurrence of such incidence, we were asked to repair of some section of the roads with the federal government promising to pay back the cost of repair...*" ***(OSMW, GA: 5)***

The maintenance of 'Trunk A' roads networks otherwise known as federal roads are the responsibility of the Federal Road Maintenance Agency (FERMA). However, in 2009 OSMW repaired some federal roads in Ondo State even though it is outside their scope. The Ministry of Works spent around twelve billion naira (₦12 billion) alone in 2009 to repairs of all federal roadways within Akure city.

- ***Approach and Projects within the Study Area.***

The Ministry of Works officials plan, designs and implementation all urban road projects without involving the residents of the recipient communities. Road projects are identified through annual capital projects; requests from communities, institutions and other government agencies and lastly through periodic surveys conducted by the ministry of works officials. A reconnaissance survey is usually conducted by OSMW engineers to determine the extent of road works and means of execution. Major road construction projects are contracted to registered indigenous engineering firms while the minor road repairs works are handled by the direct labour department of the agency.

Ministry of Works usually advertises all major road construction projects in notable newspapers and the media for three months, calling for submissions of tenders to the Ondo State Tender Board. This Ministry does not award any road contracts rather it is the obligation of Ondo State Tender Board. Once awarded to a Contractor, they must submit a certified acceptance form within two weeks from the date of the award. Failure to comply could lead to cancellation of contracts or delayed payment. In other words, even though Ministry of Works is responsible for regulating road networks in Akure city, they have no control over the choice of contracting firms executing the projects. They simply have to work with the companies approved by the Tenders Board whether indigenous or a multinational company. Only the state governor or the Tenders Board can terminate a contract. Minor road repairs were formerly handled by Ondo State Agency for Road Maintenance and Construction (OSARMCO). This was formerly a department in Ministry of Works. OSARMCO became an independent agency in 2009 but at the time of the field work, the agency was not functioning as there was an ongoing restructuring of its management. Ministry of Works however has another department having similar function with OSARMCO;

> *"…. Ministry of Works have a direct labour department which replaced OSARMCO, the new department executes regular road repairs and minor road projects which replaced OSARMCO. This includes filling up of potholes, desilting of drainages of debris or sand and clearing of road verge etc. daily labourer are employed, I mean unskilled workers…"* ***(Deputy Director of Works, (OSMW, GA: 5)***

This fragmentation of functions often leads to duplication of efforts, disorganisation and ineffectiveness. However, if properly coordinated could equally improve accessibility

and quality of road network. The direct labour department is in charge of minor road rehabilitation and repairs requiring immediate intervention but this department has to wait for approval for repairs. The approval of road repairs usually involves long processes of more than two months and sometimes longer if request was made during rainy season. Daily paid workers are usually employed to carry out minor repairs such as filling up of pot holes, road grading and gravel covering (see figure 6.2).

Figure 6. 2: Filling of Potholes by the Direct Labour Department of OSMW

All the 20 projects implemented by Ministry of Works between 2007 and 2011 were urban road networks and they included those specified in the ODSEED development plan. Table 7.6 shows the total number of projects executed between 2006 and 2009, there was no project in 2007. The cheapest project was the 4.2km road in Obaile GRA costing ₦94 Million (£375,000) while the most expensive was the 2.25km dual carriageway connecting NEPA – Arakale with the main city road at ₦2.6 Billion (£10.3 million). The widening of the road is necessary to divert peak hour traffic flow from the main city road and it is an important alternative route connecting the northern part of the city with the southern part.

Table 6.6: Road Construction Projects by Ondo State Ministry of Works.

Date of Award	Road Projects	Date of Completion	Length (Km)	Cost (₦)	Cost (£)	Remark	Location
2006	Obaile and Ijapo GRA	2007	12.8	351 Million	1.40 Million	Completed	Suburban
	Ipogun/ Ilara	2007	11	332 Million	1.32 Million	Completed	Rural
	Irese – Shagari road	2007	9	294 Million	1.20 Million	Completed	Rural
	INEC - Elshadia road in Alagbaka GRA	2006	4.2	102 Million	0.41 Million	Completed	Suburban
2008	FUTA- Awule	-	5.5	180 Million	0.72 Million	On-going	Suburban
	Iju/Itaogbolu – Aiyede Ogbese	-	12.11	408 Million	1.62 Million	On-going	Rural
	Dualization of Oba-Adesida – Isikan Road	2012	4	661 Million	2.63 Million	Completed	Urban
2009	Asphalt Overlay of Akure Township roads	2012	18	537 Million	2.12 Million	Completed	Urban
	Dualization of Owode – Obaile town road	-	8.95	1.2 Billion	4.78 Million	On-going	Rural
2010	Asphalt overlay of Oyemekun Adesida Road	2012	9.3	776 Million	3.09 Million	Completed	Urban
	Rehabilitation of Federal High Court Road	2011	0.2	141 Million	0.56 Million	Completed	Urban
	Construction of Davog- Kajola Road in Ijoka	-	3.3	204 Million	0.81 Million	On-going	Suburban
	Access Road to Adaba FM Radio Station	2011	1.6	147 Million	0.59 Million	Completed	Rural
	Dualization of NEPA – Arakale Road	2013	2.25	2.6 Billion	10.35 Million	Completed	Urban
	Construction of Sunshine Estate Road, Obaile GRA (phase 1)	-	4.2	94 Million	0.37 Million	On-going	Suburban
	Construction of Sunshine Estate Road, Obaile GRA (phase 2)	-	6.8	186 Million	0.74 Million	On-going	Suburban
	Rehabilitation of Olisaro Power line Oshinle	2012	2.7	127 Million	0.51 Million	Completed	Urban
	Asphalt overlay of Ijomu- Oke Ijebu Road	2012	3.8	289 Million	1.15 Million	Completed	Urban
	Access Road to Olokuta Prison Road Isikan and Civil Service Commission road in Alagbaka	2012	2.15	141 million	0.56 Million	Completed	Rural
	Dualization of Fiwasaye - Owo Express way	2012	3.02	597 Million	2.38 Million	completed	Suburban

Source: OSMW Desk Record (2011)

There were no new road projects in 2007 because it was an election year dominated by a lot of controversies and cases of election results being challenged by the opposition. This ultimately resulted in litigation and suspension of all awards of capital projects above ₦50 million. There were also several petitions of unethical contract approval and awards as explained by the Director of Operations;

> *"….52 road projects were uncompleted by the last administration, they were reassessed when a new government was sworn into office most of these because of various reports of poor construction practices and inflation of projects cost. Some projects were abandoned by the contractors due to insufficient funds and non-payment of mobilisation fees. A contract assessment committee was constituted by the State Governor to re-cost all the road projects that was stopped in order to determine the extent of work left and what OSMW owe the contractors….* ***(OSMW, GA: 5)***

The reassessment of the construction costs of on-going road projects led to subsequent re-awarding of several road projects. Lane and Stephenson (2000), argued that poor institutional framework is largely attributed to ineffective delivery of the organisations' functions and effective management. A change in government should not affect the operations of any development agency if necessary mechanism are in place such as administrative hierarchy, legislative and decision-making procedures, budget mechanisms and contracts requisite (Lowndes, 2010).

In 2010 the state government made significant efforts to improve the quality of road networks connecting rural and suburban areas of Akure with the city centre. Consequently, total budget for roads projects increased from less than ₦1.3 million in 2007/2009 to over ₦56 million in 2010. This amounted to 10 road projects doubling the total projects between 2008 and 2009. The difference in the cost of construction per kilometre depends on the road terrain and the amount of work involved such as construction of a bridge, drains, asphalt covering or grading, water logged soil or hilly area.

All five projects executed in Akure suburban area are uncompleted while those in the urban areas were all completed even though they were the cheapest. This shows preference for the urban areas over the suburban area, no wonder there is acute shortage of infrastructure within the region. Sometimes activities in suburban areas are considered insignificant to economic growth while the urban areas are regarded as the

centre of commerce and activities. Government often overlooked the effect of the cost of transportation on economic growth and well-being. Umoren *et al.* (2011), expounded that a good quality road infrastructure attracts socio-economic development than a bad road condition.

- ***Adequacy of State-Based Road Project in Akure Suburban Area***

Table 6.7 shows the three road projects within the case study area. Although five road projects were implemented between 2009 and 2010 in the suburban areas only three was within the selected community. The remaining two road projects are road network within the new sunshine estate which is the most recent extension to Obaile GRA.

Table 6.7: State-Based Road Projects within Case Study between 2007 and 2011

Community	Locations	Project Description		Length (km)	Percentage of Completion
		Previous	Proposed		
Obaile	Owode – Obaile town – Adesida road	• Single carriageway • unsurfaced	• Double carriageway • Asphalt covering • Bridges and culverts • Bus stop	8.95	80%
Awule and Aba-Oyo	FUTA- Awule	• Single carriageway • unsurfaced	• Single carriageway • Drainage	5.5	80%
Ijoka	Construction of Davog-Kajola Road in Ijoka	• Single carriageway • unsurfaced	• Single carriageway • Asphalt covering • Drainage	3.3	30%

Source: OSMW Desk Record (2011).

The road projects were improvement of the quality of existing urban roads in order to improve accessibility between the suburban communities in Ijoka, Obaile, Awule, FUTA area and the city centre while local access routes and streets were ignored. All the road networks were previously graded bare earth with many potholes and no drainage. They were upgraded to asphalt covering with drainages and culverts however, there was no sidewalk or bus stops. The road network connecting the Akure urban area with Obaile community and the Akure city airport was upgraded from a narrow single carriageway to a two carriageway. This road was initially a local access road with gravel covering terminating at the Obaile town centre.

The FUTA – Awule road was also upgraded from earth surface road to asphalt covering. It connected the Awule and Alaba communities with FUTA area. The residential layouts selected in Aba-Oyo communities are located very close to the Federal University of Technology Akure (FUTA) as shown in figure 6.3. The approximate walking distance from the second gate of the Federal University of Technology to these communities are Apatapiti 0.7km (8 minutes); Alaba layout 1.7km (20 minutes) and Elekinran 2.0km (30 minutes). Likewise, Awule GRA is approximately 2.5km (35minutes) while Apatapiti II layouts and Asuwamo layout are 3.8miles and 3.10km respectively.

Figure 6.3: Proximity of Aba-Oyo and Awule Communities to Federal University of Technology (FUTA) South Gate.
Source: Google Maps, (2015)

Property development and land use pattern around the university are greatly influenced by the location of the Federal University of Technology Akure because most of the staff and students of the university live within these layouts which is just a walking distance to the university second gate. Apatapiti layout was the first residential layout to open for residential development in Aba-Oyo community. This was a farmstead and coco plantation dating back to the time FUTA was established in 1981 with around eight farm huts and 116 farm workers who commute from the city daily (Olujimi and Gbadamosi, 2007). Presently there are 243 buildings in this layout and many of the

properties located within these layouts have mixed use such as student accommodation, shops, churches etc. The location of the university influenced the upgrading of Awule-FUTA road from Trunk 'C' road to Trunk 'B' road.

The Awule – FUTA project began in March 2008 and was estimated for completion in December 2009 but was suspended several times and the contractor changed twice. The first contractor was changed as a result of use of poor materials and lack of equipment while the second contractor abandoned the projects site as a result of community protests and fetish rituals. Animal sacrifices were kept in strategic places along the traditional road while masquerades also beat up and scared off contractors and site workers from the constructions site. As a result, the FUTA section of the road was completed with asphalt covering in 2011 as shown in figure 6.4 while the Awule GRA section of the road was delayed for 2 years until there was a reassessment of the GRA's layout and the road project;

> *"We were called upon severally to appeal to the Awule community leaders in Awule to stop masquerades from disrupting the construction works. People generally fear masquerades which scared away construction workers and was costing the contractor money and time. Despite several appeal the traditional community in Awule village insisted that they want the old route because it is part of their heritage and culture…. **(OSMW, GA: 5)***

Figure 6.4: FUTA Section of the FUTA- Awule Road Project.

Note: The first picture (Before) was taken in September, 2010 while the second picture (After) was taken in during the field study in December, 2011. This is explaining the changes in the minor landscape

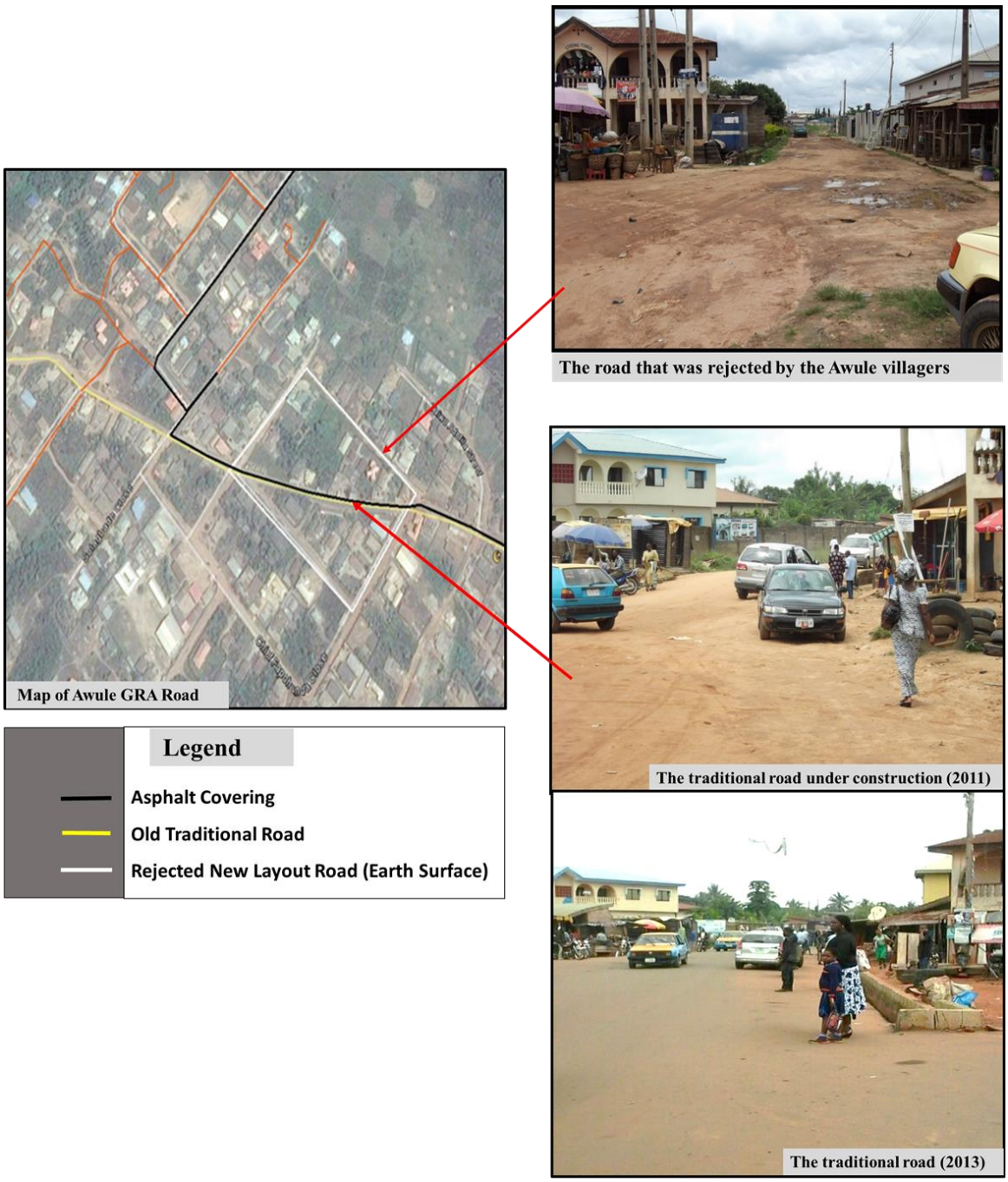

Figure 6. 5: Showing the Rejected Awule GRA Road Network

The inhabitants of the Awule village which is a traditional settlement located approximately three kilometres from the Awule GRA rejected the road project in protest of the neglect and redesigning of a section of their traditional road into residential plot. This is the main route leading to the Awule village and is considered sacred by the inhabitants. The Awule section of the new government road project was suspended for over a year to allow the redesigning of the affected plot divisions which was later reverted to the original traditional route as shown in shown in figure 6.5. Some

residential plots were also affected as explained by Ministry of Lands and Housing estate officer;

> *"…. When the Awule GRA layout was designed 27 years ago the contested road was a foot path and was considered insignificant at the time. The Awule villagers frustrated the contractor and allottees whose allocation encroached on the traditional road as it was considered sacred. The youth kept destroying the contractor's equipment and masquerades also scared off site workers. After several months of dispute resolution, the affected portion of the GRA's plan was modified and the traditional path was converted to urban road while the affected allottees was relocated to other government estates…* **(Director of Land, OSMLHS, GA: 9, 2011)**

The dispute could have been avoided if the local community were consulted during the designing of the Awule GRA layout and the road project. Road projects usually entail the planning, project development, final design, right of way and construction. The planning stage is very important as it is involving the definition of needs and decision process and it is the key time to get public input. Likewise at the planning stage issues such as historic and scenic characteristics, physical characteristics, cost, capacity, safety, multimodal consideration and environmental quality are all factors that must be considered (FHWA, 2012). In most cases information on the physical and historical characteristic of a place can only be elucidated by the local community, most especially with regards to values, religion and culture. The benefit of collecting this information is great as they will help the road developer to identify any physical constraints or opportunities early in the planning process in order to save time.

Good planning process should begin with 'scoping', a stage where developers and government officials clearly define the projects and what is required including both the financial and practical aspects of the project. The findings from scoping which are communicated to stakeholders. The stage allows stakeholders to be identified and provided with the opportunity to get involved. This enhances the planning process and provides the opportunity to avoid some unseen problems as it allows planners to identify and consider the context and physical location of the development project such as the cultural values of the project location.

Findings from data collected revealed that the technocratic top-down approach adopted by development agencies in Akure city does not give room to scoping before commencing the planning of infrastructure development even though ODSEEDS policy

emphasized the participation of local groups in development projects within their communities. Generally, road infrastructure within Akure suburban areas are deficient and poor accessibility is prominent. In terms of the quality, most of the roads within the selected communities are single carriageway and narrow with no pedestrian walkway or drainages. Apart from the few urban road networks, most of the road are unsurfaced and riddled with potholes, depressions, and sagging surfaces which impede free flow of traffic and movement.

- ***Community Involvement***

Local communities are usually not consulted or involved in the planning, design or the implementation of road projects in their community even though ODSEED acknowledges the contribution of CBO's and NGO's. The State governments encourages road contractors to employ 30% of their unskilled labour force from project recipient communities or indigenes of Ondo State as explained by the resident engineer below;

> *"It is a way of creating job for the local youth of such community in order to reduce youth agitation or vandalism. However, the characteristic of road infrastructure is that they usually cut across several communities and sometimes require compulsory land acquisition which usually leads to conflict. We therefore avoid involving recipient communities because road projects require huge capital and expert knowledge. Also in the past involving the communities always slow down the project with too many demands and tradition, we just do our work! ……" (**Chief Resident Engineer (OSMW, GA: 6)***

Community leaders are merely informed of upcoming projects when contractors are introduced at the commencement of road project. This is regarded as tokenism by Arnstein (1969) and Tosun (2006) as the local community does not have any influence on the project at all. The lack of community involvement is more to do with institutional framework and not just technical, political or financial factor. The 30% unskilled labour are daily paid workers who have no influence over the decision-making or the implementation of the road project. There is also a general notion that community's consultation and involvement will slow down the planning and delivery of road project, but the local community felt otherwise;

> *"If only the state government and their officials will understand that we are important and should have a say in their programme. It is true that we need infrastructure but at the same time we have our tradition, culture, norms which we must adhere to. It is difficult for us to just do whatever they tell us especially*

*if it is against our culture, but if they consult us beforehand we will be able to enlighten them as custodians of our traditions. For example, some roads are ancient path that are considered sacred to us therefore if we know about government intention beforehand, we can cooperate with them. But they don't always inform us of their programmes" ……. **(Chairman, Awule Community; CL: 18)***

Communities are not part of the decision-making process. Usually the leaders are not informed or consulted in the planning and implementation of infrastructure projects. Their frustration often results in antagonism and exploitation of contractors and their suppliers which sometimes result in disruption of road construction work. Recipient communities in Akure city are just passive participant which according to Pretty *et al.* (1995) and Theron, (2005) is the situation where local communities are only told what is going to happen or what has already happened. Most officials of state-based and local-based agencies are not trained in the use of participatory developments approach and therefore do not have the skills to manage community participation and the heterogeneous nature of communities. Most communities have diverse groups and people with different characters, beliefs and behaviour which requires adequate expertise to manage. A good example is the activities of youth and the local landowners in Akure suburban communities:

Members of the community particularly the youths and original landowners[6] popularly called 'Omo Onile' customarily collect 'gate fee[7]' from contractors before granting them access to construction site. Likewise, every delivery truck bringing materials to the construction sites must pay the 'gate fee' which has become a norm and a nuisance as explained by a participant of the academic focus group;

*".... The problem of the 'Omo Onile' is a common menace faced by contractors in Akure city. Most community youths regard this as a way of making cheap money and they go to any length to achieve their aim. They easily achieve this because most communities have entrance gates constructed across their community roads which limits the passage of heavy duty trucks because they cause damages to the road. Where there are no gates, the roads are blocked with materials such wood and tyres. Any contractor that wants to avoid problems with the youth usually pay off the 'Omo-Onile' including delivery truck and government official… (**FG 2: 6**)*

[6] Land owner is a person who owns large amount of land and also sell land to developers
[7] Gate fee is the unauthorised money for the use of common path, purchase of land or construction of buildings.

Most contractors and government representatives pay the imposed gate-fee in order to save time and avoid unnecessary disruptions. They also pay community members to protect their equipment from vandalism and stealing. All these payments are often factored into the total project cost and therefore increase the overhead costs of road projects. These extra costs could be avoided if the local community is involved in the decision process and its implementation and at the same time bring about affinity and social change within the local community.

Nelson and Wright (1995) accentuate participation process as a transformative tool for social change and community involvement is anticipated to produce better outcomes that will benefits administrators and the rest of society. It will lead to a better policy and implementation of decisions which will also help break gridlocks, avoid litigation costs and achieve project outcomes (Beierle, 1999; Irvin and Stansbury, 2004) Community participation encourages sharing of information with citizens who might otherwise not be engaged in the decision process while government officials equally learn which policies or decisions will probably be unpopular or fail. Also publicly debated decisions process will lead to cooperation of local community.

6.3.2 Water Infrastructure Projects

Potable water supply is mostly regarded as the responsibility of government. There are 40 water schemes across Ondo state and the Ondo State Water Corporation is in charge of water supply and distribution. Most of the water schemes are functioning below their design capacity. ODSEED policy revealed that only 10 water scheme out of the existing 40 water schemes across Ondo State is working even though their water production is below their designed capacity with a production level of 18, 459.8 cubic metres per day (4,061,156 gallons per day). The World Health Organisation recommended a minimum of 20 litres per day per person. It therefore means that only 4.4% of the Ondo State's population of over three million population have access to potable water supply. Table 6.8 shows the major sources of public mains water supply in Akure

Table 6.8: Water Schemes Supplying Akure Metropolis.

S/N	Water Scheme	Date of Commissioning	Design Capacity M3/Day	Design Population
1	Owena - Ondo Water Scheme	1965	9,900	71,106
2	Ala Alagbaka Water Scheme	1980	1350	80,000
3	Ukere/ Oshinle Water Scheme	1985	50	2,292
4	School of Agriculture Water Scheme	1988	675	11,960
	Total		11,975	165,358

Source: OSWC Desk Record, (2011)

Potable water supply to Akure city is mostly sourced from the old Owena – Ondo water scheme which has been in operation since 1965 with a design capacity of 9,900 cubic metres per day (2,177,696 gallons). Other water schemes were constructed to augment water supply in Akure city. They are River Ala, Alagbaka estate scheme (1,350 M^3 /day); Ukere-Oshinle water scheme (50M^3/day) and School of Agriculture water scheme (675M^3/day). In 1976, the Owena-Ondo scheme was only capable of producing two million gallons of water per day which was shared between Akure city (1.1million) and Ikere town now in Ekiti state (0.9million) Public mains supply was the only source of potable water supply in Akure city and environs and the entire population depends upon 1,500 stand pipes distributed around the city. By 1984 the main source of water in Akure city was pipe water (Aribigbola, 2010).

Presently the total capacity of water scheme in Akure city is 11,975 cubic per day which is supposed to serve over 165,358 people. Akure population is over 350, 000 in the 2006 census and it is projected to reach 1.8 million by 2016. The study reveals that most of the water scheme are operating below their designed capacity and as a result resident of Akure city still depends on public water supply designed to meet the needs of about 71,106 populations of Akure city in 1960 (NPC 1960). Public water supply is unreliable, erratic and in most cases, inaccessible, thus leading to high dependency on supplementary sources. The problem of intermittent electricity supply in Nigeria is a major factor affecting the generation and distribution of water supply. The policy thrust of the state government was to increase public provision from 16.02% in 2004 to 58% of the total population by the end 2008. To meet this target, the bulk of the budget and grant allocated to Water Corporation was spent on the drilling and installation of motorized and solar powered boreholes and hand pump wells as a

palliative measure to water shortage and insufficient pipe networks as explained by the project supervisor below;

> "Most of the rural and suburban lacks water pipe network while many of existing networks in the urban area were laid in the early 80's. Most of them are rusted or damaged during road construction therefore cutting off many communities from the public supply. That is why the state government decided on boreholes because it is cheaper, easier to construct and managed. It does not require extensive pipe networks compared with public main supply from the water scheme because there is no day that we don't have water pipe bust and many times we are not aware of this waste water until somebody notifies the agency…." Project Supervisor (OSWC, GA: 20)

Cooperation between planning authority and other infrastructure delivery agencies will enhance the preservation of facilities. Bursting of water pipes could be avoided if there are well laid plans guiding the location of facilities. Likewise, some activities can run concurrently like laying of water pipes, telecommunication cables etc. during road construction making for a cheaper project in the long run. It will also reduce or eliminate damages to water pipes during road construction. However, the use of updated Master Plan for the city will guide infrastructure developers in citing infrastructure development without causing damages to existing structure.

- ***Mode of Operation and Community involvement***

Water Corporation's projects are mostly selected through corporate requests from communities and other organisations. They are however funded by budget allocation and grants from the state government. Water Corporation does not accept personal application from individual while respective communities or corporate organisation must submit a written request to OSWC. Table 6.9 shows total demand (request) and supply (approval) of borehole installations in Akure city between 2007 and 2011. The suburban communities had the highest requests but the least number of borehole supplied leaving a shortfall of 80 requests. Communities whose request were rejected must necessarily seek alternative means of water provision.

Table 6.9: Distribution of Demand and Supply of Boreholes in Akure.

Year	Urban		Rural		Suburban	
	Request	Approval	Request	Approval	Request	Approval
2007	24	24	22	16	13	1
2008	15	2	26	12	19	-
2009	19	32	29	10	26	21
2010	16	16	25	20	34	5
2011	29	29	33	33	46	31
Total	103	103	135	91	138	58

Source: OSWC Desk Record, (2011)

The huge gap between water demand and in the suburb urban area was attributed to the lack of appropriate development plans guiding infrastructure provision in Akure city. The suburban areas are often regarded as part of the urban areas because of the proximity to the city centre and this therefore affects the allocation to the suburban areas.

> *"In most cases we have to work within our capital budget and sometimes it is difficult for us to differentiate the characteristic of some locations because we usually regard all areas in Akure city as urban and others outside Akure city as rural area…….. (***Project Supervisor (OSWC, GA: 20)**

The implication is that most suburban residents rely on alternative source of water supply such as springs, brooks, rain, streams, which may be unsafe for drinking and this could affect the quality of life. The highest shortfall between water demand and supply in Akure city was recorded in 2008 as shown in Figure 6.6. 37% of request for water infrastructure was unapproved due to instability in the government and election disputes and litigations in the state. Like other state-based agencies, the activities of Water Corporation were reduced in 2008. However, approval of borehole projects increased from just 14 boreholes in 2008 to 64 in 2009.

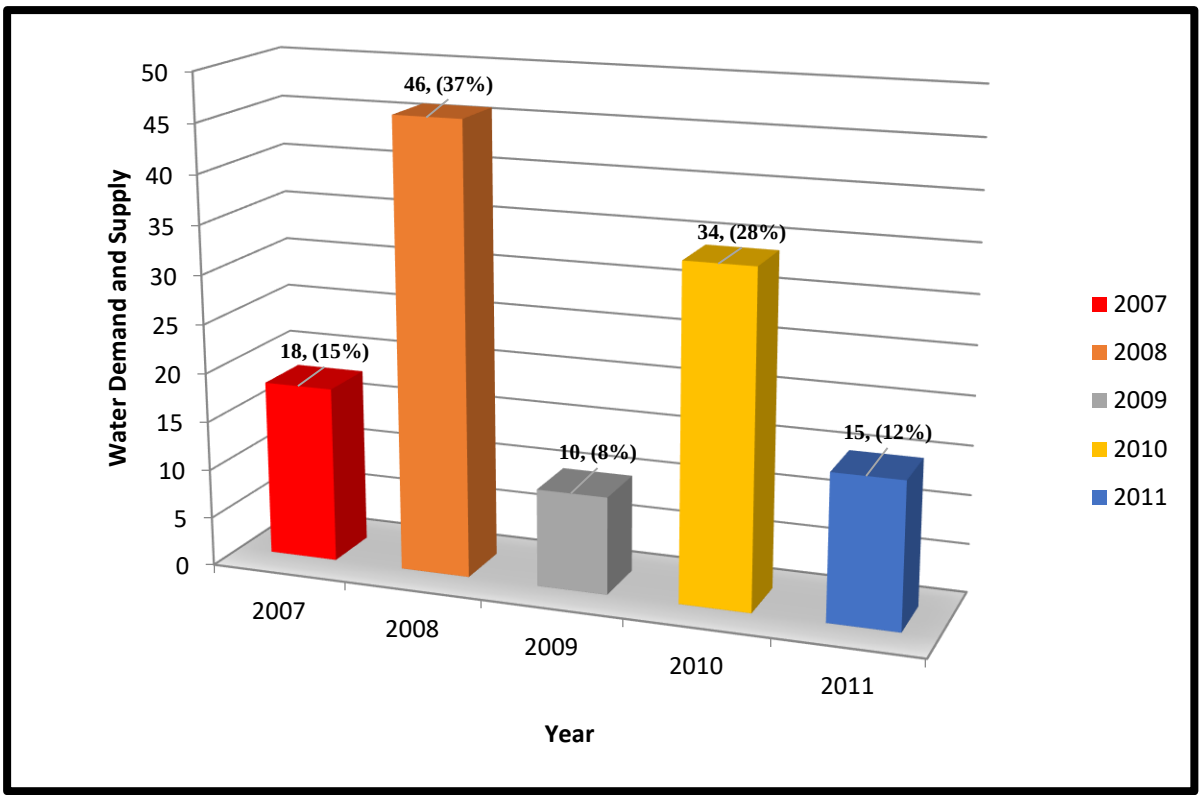

Figure 6. 6: Shortfall between Demand and Supply of Borehole Provision

Source: OSWC Desk Record, (2011)

All the decision and execution of water projects such as the location of a borehole are made by Water Corporation officials. The success and performance of a borehole depends on its location and access to good water aquifers determined with geological survey and vertical electrical sounding (VES). The VES sounding is used to check the availability and level of underground water by taking resistivity measurements using probes at a regular distance. Most borehole projects are contracted out to private companies and supervised by Water Corporation's officials. The Ondo State Tender Board awards all contracts in Ondo state and water projects are handed over to Water Corporation for management once the construction is completed. The recipient communities are only involved in the daily operation of boreholes as explained by the Water Corporation's project supervisor below;

> "*….it is expensive and unwise to have an official of the OSWC running the daily operation of boreholes. Therefore, every community must appoint a member to be in charge of the daily operation of each borehole in the community….*" ***(OSWC, GA: 18)***

Community or CBO's leaders are required to nominate a member who will be in charge of pumping of water, opening and locking of the taps and will also be responsible for reporting damages. Water Corporation officials however does the repairs and periodic maintenance because borehole installation is technical and expensive. The total cost of construction and installation depends on the soil terrain and the depth of each borehole as shown in table 6.10. The total cost includes the cost of overhead tank, generator or solar panels and PVC pipes.

Table 6. 10: Cost of Construction and Installation of Boreholes.

S/N	SOIL TERRAIN	COST (₦, MILLION)	COST (£)
1	Sedimentary	5,460,000	22,085
2	Basement	4,960,000	20,063

Source: OSWC Desk Record, (2011)

Borehole is the safest source of potable water provision. The standard size of the Water Corporation boreholes is 6-inch diameter and thirty-five (35) meters depth. Borehole drilling is very expensive and requires access to good electricity supply to pump water into the overhead tanks while most hand dug well can be drawn up with buckets hence the reason it is the most common source of domestic water supply. Aribigbola (2010) concluded that access to potable water is determined by residents' income distribution especially where they are required to pay for it.

- ***Adequacy of Public Provision of Potable Water Supply in Akure City***

Borehole water projects in the study have increased the availability of public water provision in Ijoka, Awule, Oba Ile and Aba-Oyo - FUTA communities in the study area as shown in table 6.11 (Except Omoniyi community where residents have to depend on other sources of potable water). Residents do not pay for water from the boreholes because it provided free of charge to the communities however some may have to walk a long distance to collect water. Table 6.11 below shows the total number and level of completion of solar powered borehole constructed by Ministry of Works in the case study between 2007 and 2011. Five solar powered boreholes projects were constructed within the selected communities.

Table 6.11: Borehole Water Projects in the Case Study.

Community	Location	Project Description	Total Number	Level of Completion	Designed Capacity (litres)	Number of Houses
Ijoka	Ilotin	Solar Powered	1	65%	10,000	129
	Abusoro	Solar Powered	1	70%	10,000	107
Awule	Awule GRA	Solar Powered	1	100%	10,000	243
Oba Ile	Oba Ile GRA (Zone A)	Solar Powered	1	100%	10,000	233
Aba-Oyo - FUTA Area	Alaba	Solar Powered	1	100%	10,000	289

Source: OSWC Desk Record, (2011)

Akure is known as the 'Sunshine state' with ample sunshine throughout the year which makes solar panel a good alternative source of power supply. Predictably, the average sunlight available in Akure is about seven hours daily. This is enough power to pump water when it bright and sunny. However, the month of July and August are usually cloudy with minimum daily sunshine of 2 to 3 hours daily and highest rainfall. In order to increase water supply Water Corporation usually installs two 5000 litres water tank for storage and distribution and it usually takes one day of sunshine to fill up the tanks;

> *"Part of the duty of the community representatives is ensuring that water taps are opened and locked (in most cases in the evening) at specified time known to community members. This allows the tanks to be filled up and ready because the pumps are powered by solar energy.* ***(Project Coordinator, OSWC, GA: 20)***

Figure 6.7 shows the solar powered borehole in Alaba community which was constructed in 2007. It is located on the road set back beside the residence of a former CBO leader who is also responsible for the daily operation of the borehole and opening of water taps every evening at 5:00pm. Water production is however reduced in the months of June and July to between 5000 and 7000 litres per day because of cloudiness but in dry season 10,000 litres of water is pumped per day. The borehole is the main source of drinking water for Alaba layout residents, mostly university students. The borehole is located close to the boundary between Alaba layout and Awule GRA

zone D which made it accessible to some residents of Awule GRA. At the time of the data collection the borehole was not functioning because three solar panels were blown off and damaged by a rain storm. Therefore, the community members had to seek alternative source of supply for drinking water pending the repairs

Figure 6. 7: Solar Borehole Located Within Aba-Oyo Community.

In Awule community, there is only one borehole providing potable water to the whole community and it is located at the entrance of the government estate very close to the urban road connecting the Awule GRA with other communities. Most residents have to walk or drive quite a distance to fetch water from this borehole. The borehole pump was initially electricity powered from the main grid but was changed to solar powered because of constant power failure (see figure 6.8). It was designed to produce 10,000 litres per day depending on availability of electricity supply but most times it only produced 2000 to 4000 litres as explained by the Water Corporation project supervisor

> "*Water production from the Awule GRA borehole has been problematic since it was constructed. The cheapest ways of improving borehole water production was to change it from electricity to solar power. Apart from lack of electricity, low voltage supplies have been causing constant damages to water pump, we've had to change it several times which is not cost effective……* ***(OSWC, GA: 20)***

Akure is prone to heavy rain storm especially at the beginning of each raining season which often causes damages to trees and buildings including overhead water tanks as shown in figure 6.8 and 6.9. The overhead tanks were blown away by rainstorms and were subsequently replaced by Water Corporation. Rain storms are a constant threat to overhead storage tanks and even solar panel installation.

Figure 6. 8: Awule GRA Borehole Showing the Empty Frame for Solar Panel

Figure 6. 9: The Water Storage Tanks Damaged by Rainstorm.

The Obaile borehole was constructed at the same time as the one in Awule GRA and Alaba layout but it is in a state of disrepair and neglect as shown in figure 6.10 and 6.11 below. The borehole stopped working three months after the completion as explained by the Obaile GRA (Zone 1) community leader;

> *"People use to come all the way from the Obaile village to fetch drinking water from it. Although water supply from the borehole was not regular in fact the overhead storage tank was filled with water from a water tanker the day the project was commissioned by the state governor 4 years ago. I was told recently that that the drilling failed when an official came to treat my water well……..* ***(Community leader, CL: 7)***

Figure 6. 10: Abandoned Obaile GRA Solar Powered Borehole.

Figure 6. 11: Obaile Borehole Water Taps Surrounded by Bushes.

Other residents living in the surrounding settlements also fetch water from the borehole and unlike the practise in Aba-Oyo and Awule communities, there was no nominated

resident to monitor the use and operation of the borehole or to alert the Water Corporation when the borehole stopped working. Obaile GRA is a housing estate for the affluent; politicians and top-level civil servants and most of them have boreholes and motorized hand dug wells within their residence, while some install water taps outside their houses where other residents can fetch water at designated times of the day (see figure 6.12). Also directly opposite the borehole is another residence where drinking water is sold to residents of the Obaile GRA community as shown figure 6.13.

Figure 6.12: A Tap in front of a Residence Where Water is given freely

Figure 6. 13: A Residence Where Potable Water is sold in Obaile GRA.

Investigation revealed that lack of finance; poor supervision and maintenance are major problems the adequacy of most water projects in Akure. It is the responsibility of Ondo State Water Corporation (OSWC) officials to supervise the activities of contractors especially the process of drilling the borehole. A borehole wall can easily get damaged if the steel casing and gravel filter are not properly aligned. The steel casing prevents the borehole from collapsing while the gravel filter screens out the large sand particles from entering the pump. The problems faced in places like Oba Ile could have been spotted and rectified if the projects were effectively supervised by Water Corporation officials during implementation rather than shifting all the blame on the contractor;

> *"We did not get any report that the borehole in Obaile GRA was not working, although on the commissioning day there was power failure so we could not pump enough water, but it was tested and the borehole worked later. The contractor failed to ensure the drillers to ensure that enough filter pack was fixed. They also did leave out some steel casing which they could not force inside the drilled hole because it was not straight. The only way to solve the water problem is to drill another one* ***(OSWC, GA: 20)***

The borehole stopped working as a result of system failure, however poor management also contributed to the failure of the borehole. The neglect of the borehole repairs was attributed to inadequate vehicles and manpower to maintain continuous monitoring and management of boreholes by supervisors and field officers. The problem of manpower can be reduced by involving residents in the daily management of the use of boreholes as it will improve prompt identification and notification of damages to boreholes. The adequacy of public water provision is not limited to availability and affordability; accessibility is also an important determinant. Howard and Bartram (2003) suggested that the maximum distance of water point to any household beyond 500 metres and maximum collection time over 15 minutes is adequate.

Distance to water point and the time for people to travel and queue to collect water will reduce the amount of water people will collect. Likewise, Howard, G. & Bartram, J. (2003) considered uninterrupted water flowing within a residence to be optimal access, however none of the selected communities has public potable public water connected to residences or water tap point within resident's compound. Also only Obaile GRA has public water pipes connections whereas public water supply to residences in the GRA stopped in the early 1990. However, public water is still supplied to the urban areas of Akure city. Lastly, borehole water is usually considered to be hygienic and is usually subjected to laboratory tests to determine the quality of the water. It is generally perceived to be the safest source of drinking water.

6.4 Local-Based Infrastructures Provisions in Akure.

Akure South Local Government Authority (AKSLGA) has the responsibility of providing infrastructure development for local communities in their jurisdiction, most especially in private layouts. However, the problem of inadequate finance limits the effectiveness of projects and many public organisations are reducing, reshuffling and controlling their operations by budgeting. The easiest way to measure targets is through development plan or policies. Unfortunately, the Local Government does not have any development policies or strategic plan guiding infrastructure delivery in Akure city. Even though Local Governments in Nigeria were directed by the Federal Government to formulate a Local Economic Empowerment Development plan, budgeting and community's requests are still being used to determine infrastructure projects.

Top-down approach was adopted for the implementation of all infrastructure development supervised and managed by Akure South Local Government Authority officials except in joint projects with Community Driven Development projects. Most Local government infrastructural projects are implemented through direct labour techniques by using trade men and also contracting projects to independent construction firms. The contracts are usually advertised on radio, television as well as in newspaper for three months before awarding contracts. Figure 6.14 shows the total number of infrastructure project between 2009 and 2011. 52.1% (75) of total projects were solely executed by the Local Government projects while the rest were joint projects with Community Driven Development agencies and Ministry of Works.

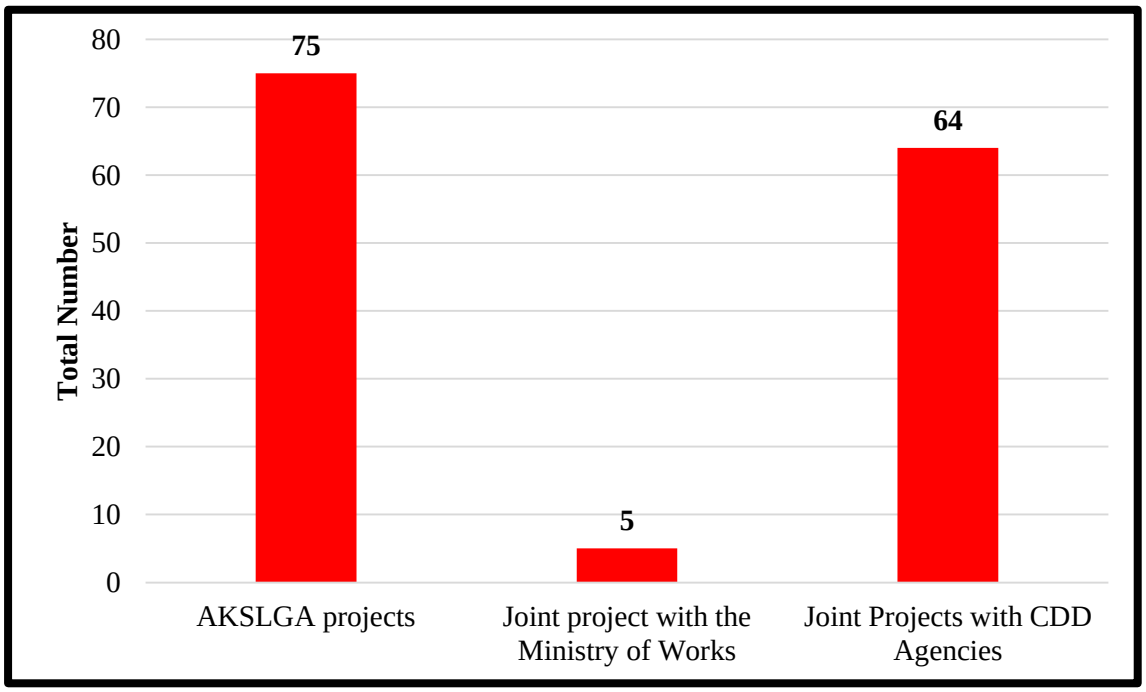

Figure 6. 14: Total Number of Akure South Local Government Projects. Source: AKSLGA Desk Record, (2011)

The project included those executed jointly with Community Driven development agencies. Part of the objectives of the CDD is the empowerment and re-integration of local government into the mainstream of infrastructure delivery most especially building local governments capacity to take on the role of facilitating community-driven development.

Our partnership with Community Driven Development (CDD) agencies lessened our financial burdens, because they provide most of the finance. This is even forcing the CBO's to register with us because we also contribute part of the cost of the CDD projects…." **Director of Works & Services (AKSLG, GA: 2)**

The partnership with CDD agencies enabled the Local Government to fulfil part of their responsibilities and reduce the effect of inadequate financial resources. The local government only has to contribute between 10% (CSDA & CBUDA) and 20% (MCDC) of total project cost depending on the Community Driven Development agencies. All the projects with Ministry of Works were road projects within the urban area, the roads were graded by the Local Government and was subsequently paved by Ministry of Works in order to improve the quality of the road. Also figure 6.15 reveals minimal cooperation between the Local Government and Ministry of Works while there is no cooperation at all with Water Corporation. Table 6.12 reveals the total number and types of infrastructure developments executed by the Local Government between 2009 and 2011.

Table 6. 12: Types of Infrastructure Projects Executed by the AKSLGA

S/N	Type of projects	Numbers of projects
1	Grading of roads and blasting of rocks	47
2	De-silting of blocked drainages	32
3	Construction of classrooms, palaces and offices	14
4	Constructions of new drainages	12
5	Drilling of boreholes	11
6	Cutting of road verges	9
7	Construction of health centre and supply of equipment	5
8	Empowerment programmes for artisans and widows	5
9	Construction of public toilets	2
10	Construction of motor parks	2
11	Constructions of market stalls	4
12	Production of galvanised street name plates and directional signs for all the streets in AKSLGA	1
	Total	144

Source: AKSLGA Desk Record, (2011).

Table 6.12 also reveals that grading of road and clearing of blocked drainages were the highest number of infrastructure projects within the study period while the remaining were mostly social infrastructures. AKSLGA does not implement electricity infrastructure and asphalt covering of road projects because they require huge financial investments. All requests for electricity projects are re-directed to OSEB as explained by AKSLG officials;

> *"…. We are not involved in the supply of transformer or do asphalt road covering because they are very expensive and in high demand. We do more of road grading, drilling of boreholes, and construction of health centre, classroom etc. because more communities will benefit ……"* Director of Works & Services **(AKSLG, GA: 2)**

AKSLGA preferred road surface grading because it is cheaper and not time consuming unlike asphalt covering. Table 6.13 shows the cost and level of completion of AKSLGA projects within the case study areas between 2009 and 2011. Grading of local access roads (Trunk C) and clearing of blocked drainages were the topmost infrastructure projects.

Table 6. 13: Local-Based Infrastructure Provision within the Case Study

S/N	Community	Type of project	Cost		Level of completion centage)
			~~(N)~~	(£)	
1.	Awule	• De-silting of 1000m blocked drains	500,000	1,671	100%
		• Grading of road (5km)	150,000	501	100%
		• Clearing of road verge	390,625	1,306	100%
2.	Ijoka	• De-silting of blocked drains (150m)	500,000	1671	100%
		• Blasting of rocks	300,000	1,003	100%
		• Drilling of borehole	4,742,179	15,856	100%
		• Construction of drainage and culverts (220m)	2,860,000	9,562	20%
		• Grading of road (10km)	675,000	2,257	70%
3.	Aba-Oyo - FUTA Area	• Grading of road (5km)	300,000	1,003	100%
		• Clearing of road verges	390,625	1,306	100%
4.	Omoniyi	• Grading of road (5km)	45,000	150	100%

Source: AKSLGA Desk Record, (2011)

Ijoka community had the highest local based infrastructure provision because it is zoned as a low income area. Also due to lack of drainages, Ijoka community was

affected by flooding in the last rainy season which led to loss of lives and properties. More funds were allocated for the construction of 220m of drainage and culverts as shown in Figure 6.15. However, the whole projects including the grading of road was delayed till the end of the rainy season. However, since road surface grading and drainage clearing are just temporary measures and cyclical, they are repeated after each rainy season.

> *"AKSLGA spent so much in grading and clearing blocked drainage, but it is still the cheapest option for us. Most times during the raining season there is usually increased problem of blocked drainages as many roadside hawkers throw their waste into the drainages and on the road instead of putting the waste in the dustbin or taking them home. Sometimes AKSLGA officials go around to clear the waste to prevent the refuse from washing downstream because it is costing us money to clear this blocked drainages, this money could have been used for some other projects"* ***Director of Works & Services (AKSLG, GA: 2)***

Figure 6.15: Culvert and Drainage Construction in Odopo Layout in Ijoka Community.

Instead of constructing new roads, the Local Government spent £6,169 on grading of Trunk C roads while £9562 and £3,341 was spent on the construction of drainage and clearing of blocked drainages respectively. Even though the road graded were 100% completed, they are not as durable as asphalt covered roads. Grading of community roads is carried out every dry season and because the roads are bare soil, the pot holes soon reappear once the rain starts washing the sand and debris into the cleared drainages. The most common types of debris are packs of water bags/bottles, corn husks and cobs. Corn is a seasonal food that comes out in the rainy season and it is often sold by road side vendors and the waste (husk and cob) are often thrown on the

road and drainages. These waste products are washed downstream by rain water causing blockages and sometimes flooding during and after every corn season.

Akure South Local Government Authority executed only one water project within the study area between 2009 and 2011and this in Ijoka. The borehole was designed to provide 10,000 litres of potable water per day and was initially operated as a solar powered borehole in 2009. It was converted to electricity because the solar panels were stolen even though the boreholes station is fenced and locked in order to prevent theft, damages and water wastage (see figure 6.16). Water production from the borehole is mostly 5000 litres a day due to irregular electricity supply.

Figure 6. 16: Electricity Powered Borehole in Odopo Layout in Ijoka Community.

Poor maintenance is a major problem affecting the adequacy of Akure South Local Government Authority projects. The officials of the Local Government's response to repair is slow and sometimes not forthcoming especially regarding road projects. This is attributed to inadequate funding and lack of equipment such as monitoring vehicles. Akure South Local Government's officials often used personal vehicles for official duties and projects due to lack of equipment and funds while projects requiring specialised equipment's or use of heavy duty vehicles are delayed until a vehicle is available. Sometimes the Local Government sometimes hires equipment to do their jobs, they also give repair work to an independent contractor even though the local government have the manpower to carry out the project;

> *"We have to wait for approval for funds to hire equipment and heavy duty vehicles in most cases even though we have the technical knowledge and expertise to carry out most repairs and this does affect our rate of response……* (**Director of Works & Services; AKSLG, GA: 2)**

6.4.1 Community Involvement in AKSLGA Projects

Akure South Local Government officials deal with local communities based on the types of projects. In most cases the local communities are not involved in the implementation and management of the Local Government's projects except joint projects with CDD agencies. The Local Government officials make all the decisions, planning and implementation, community leaders are however informed of proposed projects. Akure South Local Government is also responsible for the registration of community based organisations (CBO'S) in Akure city. Community-based organisations (CBO) groups in Akure suburban area are made up of community development committees (CDC) and community development associations (CDA). The existence and contribution of CBO's were recognised in subsection 17.2 of the ODSEED policy. The state government constituted CDCs in each local governments and CDAs in every political wards in order to encourage community participation and to integrate it into the institutional framework. These CBO's are now used as a vehicle to deliver CDD programmes to the local communities. Most of the CBO's leaders are not aware of the importance and benefits attached to registration as stated by the counsellor for community development;

> *"…. there are more than 200 CBO's in Akure city but they refused to register with the local government, maybe because of the ₦600 registration fee. The fee was cancelled by the present chairman in order to encourage more CBO's to register yet only 24 responded. In fact, some of the CBO's have cheques from grants for communal projects with us but they refused to come and pick up the check…."* **(AKSLG, GA: 3)**

Only two of the CBO's in the study area are registered and as a result their communities benefited from the CDD projects. Community-based organizations (CBOs) facilitate various collective efforts for community development, they operate through people-centred approaches and require capacity building, financial and technical assistance.

6.5 Community Driven Development Infrastructure Provision in Akure City

Community driven development (CDD) schemes are aimed at increasing local community ownership and control of infrastructure developments. This is done by empowering community based organization (CBO) with resources and authority needed to make this a reality. CDD is a term used to describe projects that increase local community control over decisions about planning, implementation and resource allocation in their localities. It is the World Bank's strategy for delivering development assistance (Dongier *et al.*, 2003a; Mansuri and Rao, 2004). CDD also expands the finance infrastructure development and strengthen motivations for participatory development (Platteau, 2004). It also encourages community's sense of ownership which could ultimately result in efficient service delivery and management of projects. Several authors raised concerns regarding the effectiveness of transferring greater control and ownership to projects beneficiaries (Cleaver, 2001; Kothari and Cooke, 2001; Cornwall, 2008). It will largely depend on the quality of participation and the conditions under which participation is taking place; the interest and manner with which participants choose to represent themselves and generate changes. It will also involve willingness of officials of key institutions to implement participatory development approach and a change of role of governments in relation to markets (Hanson and Just, 2001)s. Participatory development encourages the change of role of government from provider to facilitator as observed from the CDD programmes in the case study.

Community Based Urban Development agency (CBUDA) provides for the core urban area of Akure city; both Community and Social Development Agency and Ministry of Community Development and Cooperative Services focus on the development of the rural area of Akure city. None of these agencies is directly responsible for the provision road and water infrastructure in the case study. Each of these agencies implement participatory approach where local communities are involved in the decision-making process and implementation of infrastructure projects. Most of the CDD projects are implemented by the community members with the exception of Ministry of Community Development and Cooperative Services where the first CDD project is executed solely by their officials. This section assesses the contribution of CDD agencies to infrastructure provision in the suburban areas of Akure city.

6.5.1 Ondo State Community Based Urban Development (CBUDA) Projects.

Community Based Urban Development is a World Bank assisted agency established to improve and provide infrastructure development within core urban areas of Akure city where the majority of the urban poor live. Table 6.14 shows the infrastructure approved by Community Based Urban Development. CBUDA did not execute any project within the case study even though they are located within Akure city and are officially recognized as urban area. the officials of CBUDA acknowledged the neglect of the suburban areas of Akure city as their operations are restricted by the institutional framework limiting the focus of Community Based Urban Development Agency to urban area and do not extend to the suburban areas as explained by the project coordinator;

> *"We are aware of the poor state of infrastructure developments in the suburban areas of Akure city, however we can only attend to requests from communities in the core areas of Akure city which are the traditional settlements which are old residential layouts which have gradually become a predominantly slum area. These communities were identified by World Bank officials for the millennium development initiatives" …. **(CBUDA, GA: 14)***

Table 6. 14: Community based Urban Development Projects in Akure.

PROJECTS	TOTAL NO	STATUS
Road and drainages	39.5 km	Completed
Flood control	8.38km	Completed
Water pipe network	12.35km	Completed
Drilling of Bore Holes	3	Completed
Supply of electricity transformer and construction of substation	9	Completed
Construction of four (4) compartment public toilet	10	Completed
Purchase of waste collection truck	10	Completed
Fumigation and treatment of termite control of public primary schools	14	Completed
Provision of GIS laboratory to the Ministry of Physical Planning and Urban Development	1 laboratory	Completed
Training and institution capacity of personnel of Ministry of Physical Planning and Urban Development	385 staffs	Completed

Source: CBUDA Desk Record, (2011)

Five communities comprising twelve private residential layout requiring urgent intervention were identified as slums within Akure city. Most residence within these zones have mixed uses where the front are shops while every available spaces is turned into accommodation occupied mostly by low income workers. These communities have existing public road, water and electricity infrastructure however they are grossly insufficient and in bad condition. They require upgrading in order to improve the quality of life and well-being of residents of these communities. Table 6.15 shows the location of CBUDA projects executed between 2005 and 2011.

Table 6. 15: Locations of Community Based Urban Development Projects in Akure.

Benefiting Communities	Road Length(km)	Water		Location
		Boreholes	Length of pipes	
Oke Aro/Eyinke	5.02	-	2.63	Urban
Irowo/Odige/Odopetu	4.18	-	2.02	Urban
Isolo/Ijomu/Odokoyi/Aiyetoro	7.34	2	-	Urban
Imagun/Araromi/OkeIgan/Owode	10.12	1	7.70	Urban
Oyemekun roads	12.6	-	-	Urban
Total	39.26	3	12.345	

Source: CBDA Desk Record, (2011)

All the road constructions were existing urban roads with gravel covering and potholes. 39.3 km of roads and drainages was constructed within core areas of Akure city and all the roads construction paved with asphalt which improved the quality of the roads. Access to potable water provision was improved with the drilling of three boreholes and the replacement of 12.35km of damaged PVC water pipes.

6.5.2 Ondo State Community and Social Development Agency projects (CSDA)

The focus of Community and Social Development Agency are the remote rural areas of Ondo State. 83 community development plans were approved and implemented between 2009 and 2011. Community and Social Development Agency communities were given the sum of ₦10 million (£337,952) while recipient community contributed an additional 10% to execute three CDD projects. The grant was disbursed in three installments. The second and the third installments were only released at the completion of the preceding projects. Table 6.16 shows the total number of infrastructure projects approved by Community and Social Development Agency.

Table 6. 16: Community and Social Development Agency Infrastructure Projects in Akure.

Infrastructure	Total Number of Projects			Benefiting Communities
	Approved	Completed	On-going	
Education	34	33	1	34
Rural Electrification	23	16	7	23
Environment & Natural resources	12	9	3	12
Gender & Vulnerable	3	3	-	3
Health	33	29	4	33
Road	42	26	16	42
Socio Economic	50	27	23	50
Water	61	61	-	61
Total	258	204	54	258

Source: CSDA Desk Record, (2011)

The demand for potable Water was the highest. 61 motorized borehole projects were approved and completed by the Agency while only 26 road projects were completed out of the 42 projects approved by CSDA. Road projects are more technical, unlike boreholes which could be constructed at any time. Some communities have more than one project approved by CSDA while 258 communities benefitted from Community and Social Development Agency projects but only eight communities were located in Akure city as shown in Table 6.17.

Table 6. 17: Community and Social development Agency Projects in Akure.

Communities	Political Ward	Number of projects	Status		Location
			Completed	ongoing	
Olorunsogo	8	3	3	-	Rural
Okemeji	10	3	3	-	Rural
Jaga-ilotin	5	3	3	-	Suburban
Ire Akari III	11	3	-	3	Rural
Olu-Akintunde	10	2	-	2	Rural
Aduralere	8	2	2	-	Rural
Ita Oniyan	1	3	-	3	Rural
Ago-ireti	-	3	3	-	Suburban

Source: CSDA Desk Record, (2011)

Table 6.17 shows that only two suburban communities benefited from Community and Social Development Agency projects while the remaining projects were located in

remote rural areas. The only community within the case study that benefitted is Ilotin layout that benefitted through neighbourhood collaboration with another CBO. Jaga – Ilotin are two residential layouts sharing boundary and access roads with Ijoka community. These communities were converted from agricultural land use to residential due to urban sprawl. They are still classified as rural areas on the master plan and still retain some characteristics of agriculture land use such as subsistence farming. The CBO's in both communities collaborated and requested for road and water projects, Table 6.18 shows the cost of the projects;

Table 6. 18: Jaga-Ilotin CDD Projects.

S/N	Project description	Cost (₦)	Status
1	2 motorized boreholes	3,702,200	On-going
2.	Road and culvert	3,656,415	On-going
3.	Drainage	3,026,625	On-going
	Total	10,385,24	

Source: CSDA Desk Record, (2011)

Two boreholes projects were executed to provide potable water for residents of Jaga and Ilotin. All the access road within the layouts and the main road connecting both communities with the urban road was proposed for grading and gravel covering which also included the construction of drainage and culverts. Community and Social Development Agencies approved N10, 000, 000 (90%) while the community contributed ₦1, 000,000 (10%) however the Community Project Management Committee (CPMC) only spent ₦10, 385,240. Although the projects were uncompleted they will improve resident's access to potable water and road network within these layouts where there is no other public provision.

Community and Social Development Agency projects is improving women and vulnerable residents' involvement in community participation and access of to social services in rural areas of Ondo state. The women and the vulnerable such as children, disabled and elderly are granted priority during the decision-making process as men often dominate the activities of most CBO's. Likewise, the first projects in the community need list must be the one selected by the women and vulnerable. In Jaga–Ilotin community, water projects were chosen by the women and the vulnerable groups.

Figure 6.17 below shows the percentages of male and female who have benefited from Community and Social Development Agency projects between 2009 and 2012.

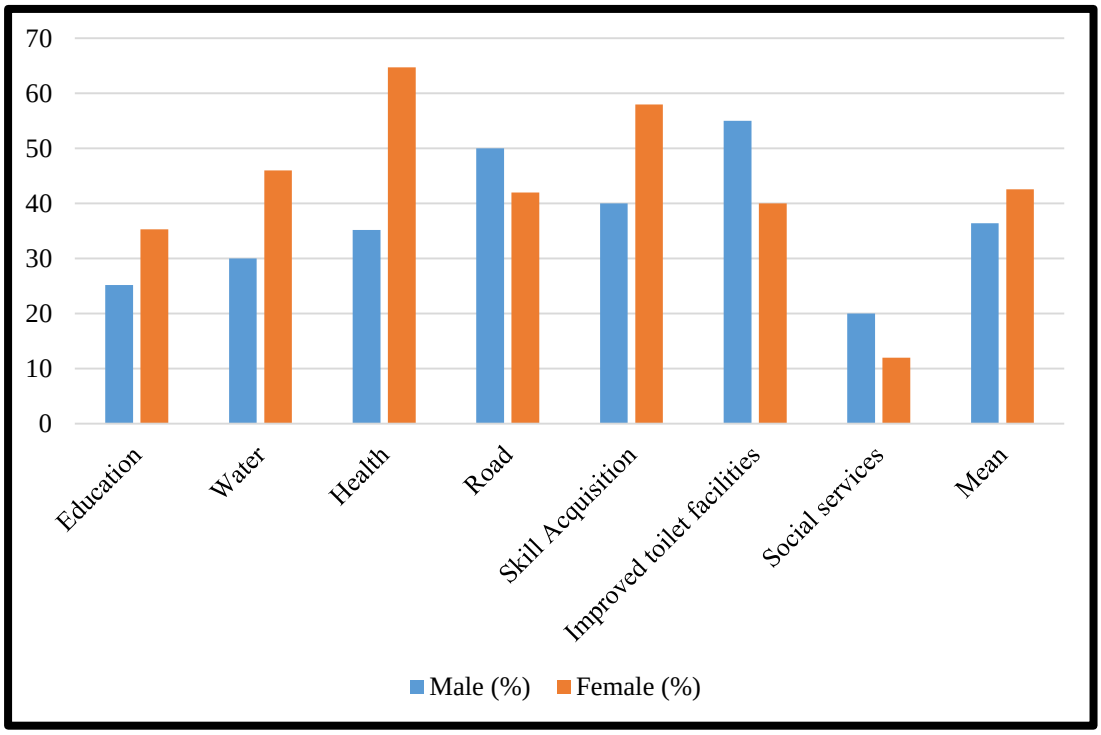

Figure 6.17: Beneficiaries of Community and Social Development Agencies Projects
Source: CSDA Desk Record, (2011)

Most men mostly preferred road and toilet facilities while women rated water, health, skill acquisition and educational facilities as very important. Water projects was the top of the list because all the women consider its importance to their existence and domestic activities as more time is spent in search of good water for drinking and domestic use such as food preparation and hygiene. Health facilities is needed because of child birth and child mortality as explained by a resident of Ilotin;

> "*When were asked to choose the projects that we want. We first of all picked health centre and water. The State Hospital is very far away from our community and when some of us want to give birth or any of our children is sick in the night we find it difficult to get transportation to the main hospital. Most time we buy sachet water to drink while we trek so many kilometres searching for water for household need. My children like most children in our community always spend all their time after school to fetch water but if we have a borehole reduce the stress and time spent and they can have more time for their homework and other activities……* ***(Female Residents of Ilotin, RI: 13)***

In Yoruba culture women are expected to be passive homemaker while the men decide every important decision, however Community and Social Development Agency approach is increasing women participation to a mean average of 45%.

6.5.3 Ministry of Community Development and Cooperative Services (MCDC)

The Ministry of Community Development and Cooperative was established to improve access to infrastructure development in the rural areas of Ondo state. The aim is to enhance economic development, reduce rural-urban drift and poverty levels of rural dwellers. The Ministry's programmes were divided into three phases with the first being implemented between 2010 and 2011. A total number of 308 projects was approved for 308 communities in the first phase between 2009 and 2011 (Table 6.19). Although each community have three projects on their need list, only one project was approved each community in the first phase as a pilot study.

Table 6. 19: Total Number of MCDC Projects in Akure in 2010-2011.

Infrastructure	Projects		Number of Projects
	Completed	On-going	
Basic health centre	87	-	87
Town hall	56	-	56
Water supply	67	5	72
Open market stalls	24	2	26
School classroom	22	-	22
High Courts	1	-	1
Rural feeder roads	7	8	15
Rural electrification	15	8	23
Cottage industries	4	-	4
Skill acquisition	1	-	1
Public toilet	1	-	1
Total	285	23	308

Source: MCDC Desk Record, (2011).

Although MCDC adopted a participatory development approach where the decision process is bottom-up, the officials of MCDC solely executes the first projects without any involvement of residents of befitting community while communities implement the second and third projects. This approach is different from the other two CDD agencies

sponsored by World Bank where all the decisions and implementations are bottom-up. It shows the unwillingness to relinquish total control to the local community even though they were trained in the use of participatory development. Community driven development is a shift from the dominant model of centrally planned and administered development programs.

Thirty-three communities benefited in Akure South LGA and each implemented a project. Figure 6.18 shows the distribution of Ministry of Community Development and Cooperative projects in Akure. 76% (25) of the beneficiaries were rural communities while 15% (5) and 9% (3) are in urban and suburban communities respectively. Only three of the projects are located within the case study namely electricity and water projects, there was no road project (Table 6.20).

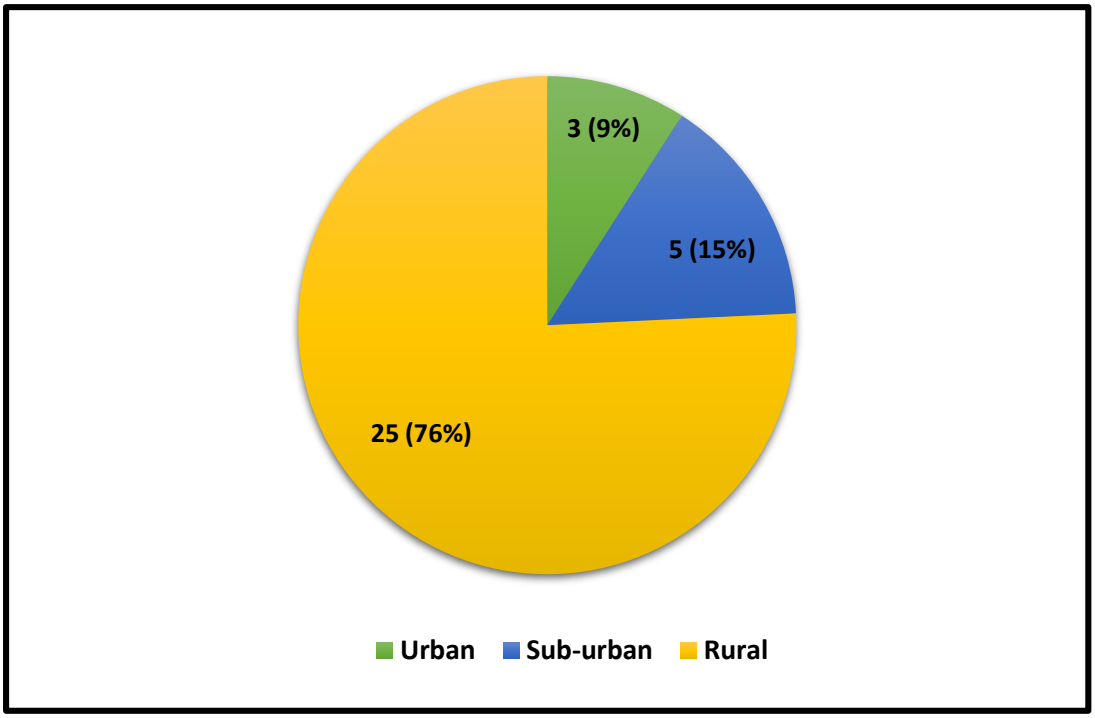

Figure 6.18: Distribution of MCDC Projects in Akure.
Source: MCDC Desk Record, (2011).

Table 6. 20: MCDC Projects within the Case Study.

S/N	Community	No of Project	Type of Projects	Cost	Status
1	Ijoka	2	Extension of electricity with Transformer in Ilotin	7,535,000	On-going
			Provision of Electric transformer in Abusoro	8,874,580	Completed
2	Awule	1	Solar powered boreholes	4,850,200	On-going
	Total	3			

Source: MCDC Desk Record, (2011).

The procedure of selecting beneficiaries is not devoid of political interference and lobbying. Most of the projects implemented in the urban and suburban areas were approved at the discretion of the State Governor and were classified as 'special projects'. Ministry of Community Development and Cooperative projects were distributed according to senatorial district with the aid of the outdated Akure Master Plan;

> *"We don't just approve applications submitted by communities, we have to ensure that our projects are not concentrated in a particular location or senatorial district even though we do try to approve most of the request from rural communities……. we also use our discretion because we know the Master plan is outdated and it is currently being reviewed. Many of the rural areas on the old masterplan still retained their characteristics with a few exceptions in the urban areas but the provision of amenities in most of these communities has not really improved. This is why it is still safe to use the master plan, because we really don't have a definition for suburban, we simply classify an area as urban or rural….* **(Community Development Officer, GA: 13)**

Requests from rural communities in Akure have more priority since MCDC's framework is tailored towards improving access to infrastructure provision and the development of the rural areas. Unfortunately, the lack of clear delineation of suburban areas means less attention is paid to this section of the city.

> *"During the last election campaign in 2007, we decided to appeal for help from all the party leaders or their representatives that came to campaign in our community. We realised that the easiest way we can get any assistance from government is to trade our vote for infrastructure. The political party we voted for won the governorship election and the governor fulfilled his promise by approving our request for a transformer through the Ministry of Community Development and Cooperative. We did not have any problem raising the 20% since we had contributed money towards the projects. Officials of the Ministry came to assist us to appoint change champions MCDC solely did the first projects and promised to involve the change champions in the remaining two*

projects. The Ministry of Community Development and Cooperative objective is very good although there maybe have some political motives. However, we don't mind at least we get to have our say and involvement in the development of our community (laugh)…" **(Abusoro Chairman, CL: 11)**

The achievement of most governments is judged by the amounts of projects executed and these are often used as campaign tools. Recently local communities realized that they can trade their vote for projects and could also be a method of meeting specific needs of their community. The study also revealed that other communities took advantage of the outdated master plan. Influential members of the community working in a state-based agency knew of the importance of masterplan and simply capitalised on the weakness;

*For several years we have been contributing towards a new transformer but we were advised a new member of our residents' association by to apply for a transformer through from MCDC. He told us that is what the politicians and friends of the commissioners are doing and that unless we claim to be a rural community our request will be rejected [...] He also helped to expedite the approval of our request since he works with MCDC. Our request was granted within three months from the date we submitted and Ministry of Community Development and Cooperative change agents came to conduct the needs assessment for our community" (***Resident FG2:4)**

Plateau (2004) believes that social elites often influence and diverts CDD projects and funds from its intended purpose and targets. These are mostly educated individuals, politicians, or state employees who live in deprived communities or have access to key logistical resources. It is difficult to separate political influence and lobbying from governance especially in a democratized society as they have gross influences on infrastructure sector. Political influence was identified by participants of the academic focus group as the main motive for state involvement in CDD initiatives;

*"The community day was celebrated by the state government and so much was spent to organise the program. The money spent could have been distributed to local communities. Before the Community day MCDC commissioners and his officials went round several communities to invites local communities and their leaders [...] they even made a tee-shirt which was distributed to participants. They never explained how they arrived at the final selection of beneficiaries despite all the press conference……. **(Academic Focus Group,*** **FG4:6)**

The Visitation of Change Agent and MCDC's official's selection to the assess the needs of recipient communities and the distribution of cheques for the second projects are regarded as political manipulation due to the pomp and pageantry that often

accompany such visits to local communities. They are often televised and broadcasted on all the state owned television and radio stations even though these are classified as working visit. Also the criteria for the final selection and approval of projects are not usually made clear. The final selection is executed in the MCDC's office even though communities are made to list their needs in order of priority. This is different from the other CDD agencies. Participants of the academic focus group believed that the interference of the MCDC official in the decision-making process reduces the goals of participatory development approach;

> *"Why should* Ministry of Community Development and Cooperative *officials be involved in the selection of CDD projects if it is really participatory development? Other agencies do not change or influence the decision process. The final selection is carried out by local communities and they implement all the projects. MCDC CDD projects are not real participation rather it is tokenism"* **(FG 4:1)**

However this process makes the final decision susceptible to elite control and undermines the effectiveness of CDD projects which must be based on genuine empowerment of participants (Edwards and Hulme, 1996; Platteau, 2004). Effective monitoring and evaluation of development process by officials of CDD agencies could be used to reduce undue interests of local elites most especially where women and the vulnerable members of the communities are involved in the decision process. Nevertheless, the activities of the CDD agencies revealed that with the necessary skill, resources and monitoring it is possible to improve the outcomes of infrastructure development process while local community control resources and implement developmental projects.

6.6 Chapter Summary

Nigerian governments have traditionally been involved in the provision of public infrastructure. Over the years there has been a natural monopoly of public infrastructure with little or no private involvement because of huge financial investment and this makes it very difficult to establish strong competition. Public provision is driven by cost saving instead of citizen satisfaction (Aulich, 2011; Warner, 2013). Although public provision improves availability, affordability and accessibility of infrastructure, services supplied cannot meet the increasing demand most especially in the suburban areas. Most public infrastructure is concentrated in the urban and rural areas of Akure city while the suburban is overlooked because of the poor delineation and the assumption that it is part of the urban. The adequacy of public infrastructure provision

is also hindered by lack of finance. Only state-based and CDD agencies can afford asphalt road covering for most of their road projects while local government can only afford surface road grading. Public water supply in the suburban areas was limited to supply from motorised hand wells and boreholes and there is no public supply of water inside the residence or compound. Furthermore, the study reveals the use of multi-organisation approach and lack of collaboration and control of activities of key institutions affect the qualities of public infrastructure provision in the Akure city.

Most of the agencies operate in isolation apart from the CDD agencies which has limited interaction with Akure South Local Government in order to help improve the state of infrastructure development and also assist the local government in discharging their duties. The bulk of the responsibilities for public infrastructure provision in the suburban area lies with Akure South Local Government and there is increasing demand for infrastructure facilities as a result of growing population and economic activities. Unfortunately, the local government lacks the financial capacities to meet the growing demand. The lack of finance for public investment in infrastructure is partly due to poor revenue generation most especially at the local government level. It has been established that the primary form of revenue for local government is the tenement rate. It is a tax paid by residents for the use of public infrastructure, however the Akure South Local Government (AKSLGA) neglects this important source of finance. Even though most Akure suburban dwellers refuse to pay the tax because of inadequate provision, the Local Government on their part do not enforce payment or take legal action against defaulters. Rather, the Akure South Local Government depends solely on fund allocation from the Federal Government. This is a narrow financial base and explains why the local government struggles to allocate resource to different sectors.

The study also reveals that inadequate resources and lack of skill about participatory approach are the underlying reasons why state-based agencies refuse to incorporate community participation into infrastructure delivery process. They prefer top-down approach and dealing with contractors while community participation is considered a waste of time and resources that could be used to improve the project delivery. Therefore, top-down approach is the most widely accepted approach to planning, designing and implementation of infrastructure developments. On the other hand, the three CDD agencies in Akure city provides finance, training and framework, the technical expertise for local community participation. Most importantly the CDD

agencies involves residents of recipient communities in the decision-making and implementation of projects while government became ‘enabler’.

Furthermore, collaboration between the CDD agencies and local government will lessen the impact of inadequate finance as government agencies could pool resources to implement projects. This could further improve adequacy especially the quality. Limited consultation between government agencies and local communities means that there is limited flow of information between all the stakeholders and therefore lack of transparency in the development process. Community leaders argued that they are not given a clear explanation or consulted over policies and decisions about development projects, even though in most cases they are mostly affected by the decision taken by government officials. Several negative assumptions and interpretation of policies were mainly because they were not provided with adequate information or consulted about the policies, procedures or processes in relation to development programmes in their communities.

Findings reveal the need for interaction between the local communities and key institutions as lack of information and transparency affects the adequacy of infrastructure project and sometime results in the abandonment of projects. The exchange of information between all the stakeholders involved in CDD projects increases local participation, ownership and the outcomes of the projects. However how effective was local participation? The level of community involvement in provision of adequate infrastructure development in the case study will be further discussed under each infrastructure projects in chapter eight.

There is also the need to clearly separate the roles of regulatory agencies from delivery of services as it often leads to conflict of interest and hinders the optimal performance of the public institution. Wherever possible and practical, regulation and delivery should be fulfilled by separate institutions. Bundling of functions of government agencies in Akure city is limiting the adequacy of infrastructure provision and it is largely due to weak institutional framework. Poor institutional framework has been identified as a major cause of many failures in service delivery (Hamzah, 2010). It is largely due to lack of a clear institutional structure for planning and management, as well as limited capacity of regulatory institutions to coordinate, harmonise and manage initiatives as well as manage other stakeholders involved in the infrastructure delivery.

The result is inefficiency and poor facilities that do not meet either current or future demand. It is important that stakeholders co-operate and have clear definitions of roles and responsibilities, work transparently, and be in dialogue with each other. It is will help in building partnerships, practicable institutional structure and implementation of development plans or policies. Having presented findings and discussion on the public provision of infrastructure in the case study, the next chapter will examine the contribution of community self-help projects to adequacy of infrastructure development in Akure suburban areas.

Chapter 7. Community Involvement in Infrastructure Provision

7.1 Introduction

This chapter assesses the contribution of community self-help projects to provision of infrastructure development in Akure. It examines the nature of participation and local community's understanding of the concepts of community participation. It also examines the roles of participants and sources of finance for community self-help projects and the factors influencing community participation in infrastructure development in the suburban areas of Akure city. Key stakeholders within the selected communities such as community residents, community and CBO leaders were interviewed in order to assess local approach to participation especially the decision process and mode of operations. In the study, local participatory efforts in the provision of road and water infrastructures were assessed based on availability, accessibility, affordability and the quality of the infrastructure. These parameters were discussed earlier in chapter two.

7.2 The Case Study

Five communities were selected within Akure suburban area and within these communities 12 residential layouts were studied as shown in Figure 7.1 and Figure 7.2 respectively. They comprised of 10 private layouts and two government residential areas (GRAs). All the layouts are formal settlements used for residential developments and they are registered by the Ministry of Urban Development and Physical Planning. All the layouts were formerly rural areas and agriculture land up until early 1990's, but over the years with the expansion of the city, they have become majorly residential areas. Layouts are used synonymous as neighbourhood in this research. Many of the private layouts were formerly communal land administered by kings and traditional rulers but over the years and with many bequest, they are now family layouts. Only Odopo layout still have communal ownership, whereby the traditional leader popularly called 'Chief Odopo' is the custodian of the layout. He is a major gate keeper in Ijoka community and is also involved in the decision process;

"[…] although chief Odopo is an old man, he still tries to attend our meetings and he is very much involved in communal activities […] in facts we have to inform him of major decisions and also go to him for land dispute settlement and anybody that buys land in our community has to pay certain amount which is for the chief. The post is a traditional title, when he dies one of his children will become the next chief […] ***(Community Leader, Odopo Layout; CL:9)***

Figure 7. 1: The Location of Selected Communities in Akure.
Source: Google Map, (Accessed in 18.07.2016).

Table 7. 1: Total Number of Houses and Type of Layouts in the Case Study.

S/N	Community		Locations/Layouts	No of houses	Type of Layout
1	Aba-Oyo- FUTA	A	Apatapiti Layout	243	Private
		B	Elekinran Family layout	57	Private
		C	Alaba Layout	289	Private
2	Awule	D	Awule GRA (Zone D)	189	Government (Site and service scheme)
		E	Asuwamo Family Layout	67	Private
		F	Apatapiti II Layout	98	Private
3	Ijoka	G	Odopo Layout	224	Private Communal
		H	Ilotin Layout	199	Private
		I	Abusoro Layout	172	Private
4	Obaile	J	Fatuase Layout	43	Private
		K	Obaile GRA (Zone A)	233	Government (Housing and site and service scheme)
5	Omoniyi	L	Omoniyi Layout	72	Private

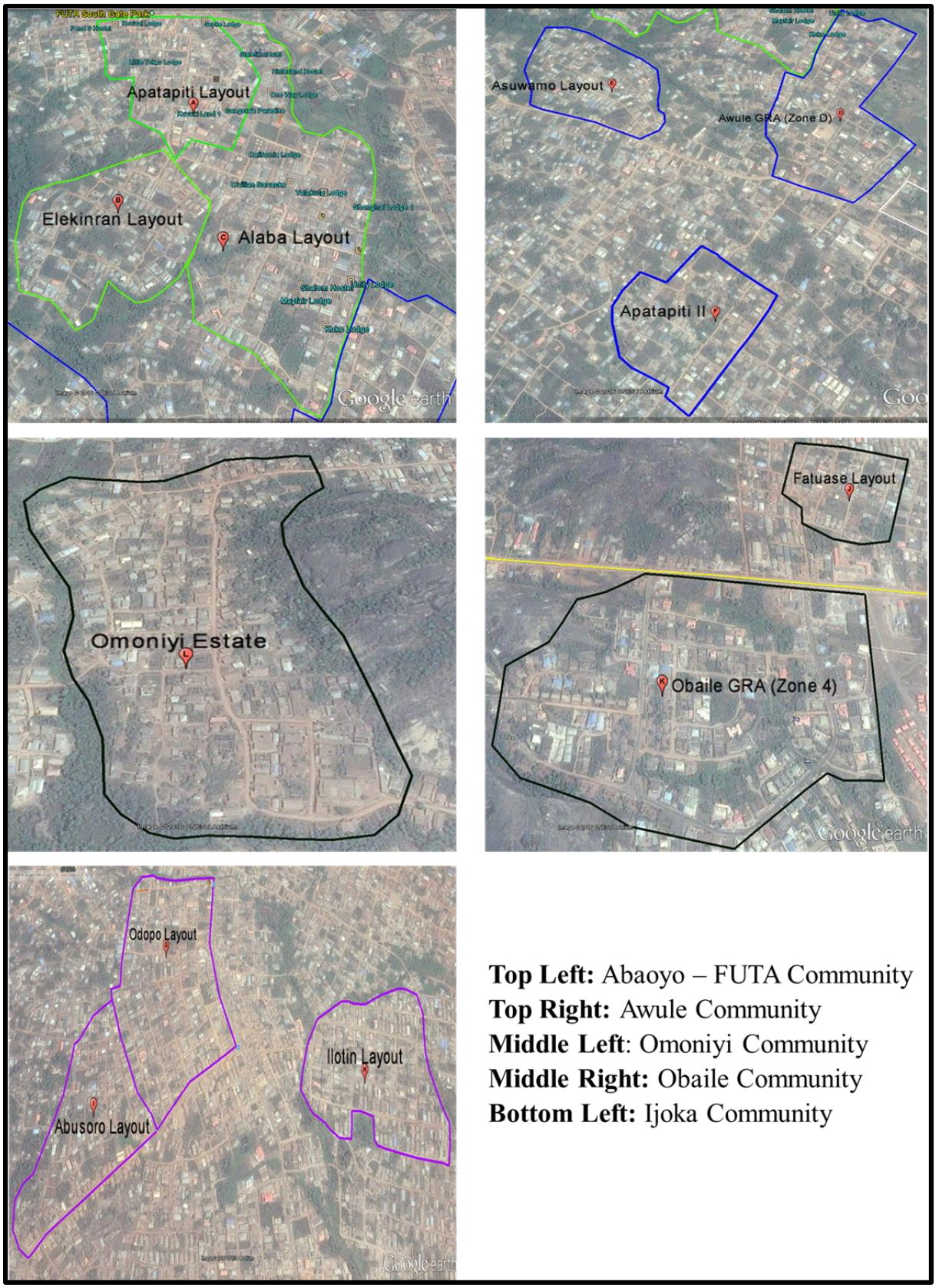

Figure 7. 2: Satellite View of the Selected Communities in the Case Study. Source: Google Earth (Accessed in 12.07.2016).

Residential layouts are parcels of lands which are subdivided and sold to individuals or organisations for residential construction. Private layouts are mostly owned by

families and are sold to individuals or organisation for developments who will subsequently register the leasehold with the Ondo State Ministry of Urban Development and Physical Planning. Government Residential Areas (GRA) are government owned parcels of land subdivided and sold to the general public on leasehold. Alaba Layout (289) has the highest number of residential properties followed by Apatapiti layout (243) (see Table 7.1). The layouts are very close to the Federal University of Technology and as a result has become densely populated while there is no student hostel in Elekinran, Asuwamo and Awule GRA layouts however many of the residents are FUTA staffs;

> *"I am an academic staff of FUTA while my wife teaches in FUTA secondary school. We have been working in the university for over 16 years and used to live in Alaba layouts which makes it logical for us to buy a plot and build a house near FUTA. This saves us from commuting and also reduces the cost of transportation greatly. Most of the houses in our community are owner's occupier and as a matter of fact many of the residential houses in the layouts around the university are either owned or rented by FUTA staffs as living close the university is the only way to avoid huge cost of transportation and the advantage of easy access to place of work. Although some of the houses may not be up to required standard as the easiest way to avoid payment of exorbitant rents is to simply build your residential accommodation based on your financial ability……* ***(Community Leader; Elekinran, CL: 5)***

The proximity of Abaoyo-FUTA and Awule communities to the Federal University of Technology Akure is largely responsible for the rapid development of these communities. They are within trekking distance from the university and therefore became popular residential locations for both student and staffs of the university. There are approximately seventeen student hostels in Apatapiti and Alaba layouts (See Figure 7.3) and at the time of the data collection Alaba layout has expanded and merged with Awule GRA (Zone 4), so much that it is difficult to identify the boundaries between these two communities.

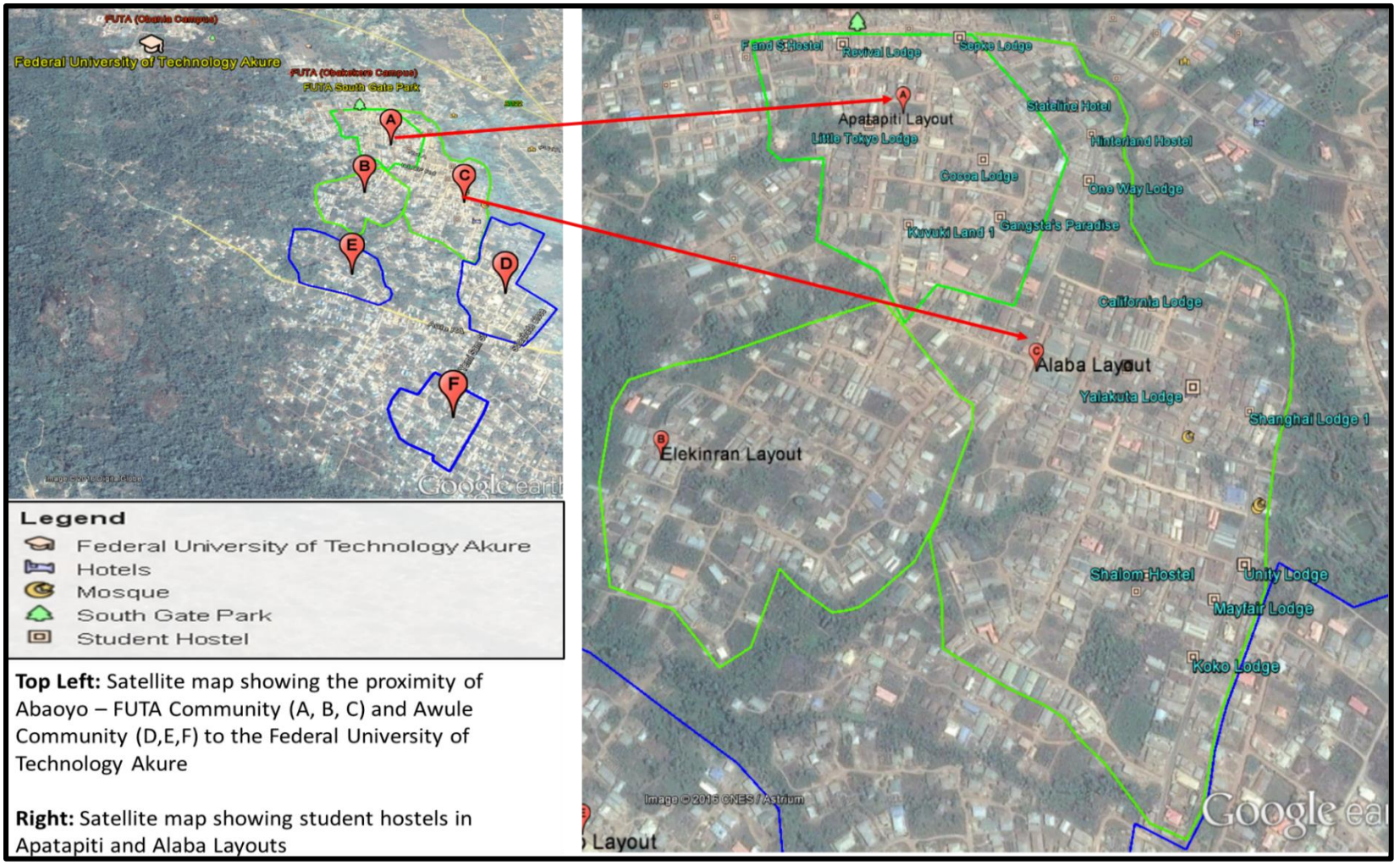

Figure 7. 3: Locations of Student Hostels in Abaoyo –FUTA Area.
Source: Google Earth accessed in 12.07.2016

Elekinran and Asuwamo are both new residential areas and plots owners can develop their plots as they deem fit as long as they have planning permission from Ministry of Urban Development and Physical Planning. Land plots in Awule GRA are restricted to residential properties except areas designated for other land uses such as commercial land uses (shops) and schools etc. Awule GRA is a site and service scheme where plots of lands are allocated to developers for residential development while Obaile GRA on the other hand is a government housing scheme and site and service scheme. Residential houses comprising of two and three bedroom bungalows and four bedroom two storey buildings were built and allocated to civil servants by Ondo State Government through the housing corporation. Also within the Obaile GRA, serviced plots of lands were sold out and the buyers constructed the houses. All the GRA residential properties or plots have a ninety-nine years' leasehold from the date of allocation with certain condition of use for example the burying of the dead in residential quarters, a popular custom in Akure, is forbidden on government residential estates but allowed on private layouts.

The Yoruba culture and some religions discourage the burying of the dead outside of their homes because the culture interprets this to be dishonour to the dead especially aged parents as they believe they will be lonely in a cemetery. Also the culture encourages homeownership which they believe includes burying the owner within the house or compound instead of incurring the cost of a private cemetery while public cemeteries are regarded as a place for paupers and the homeless. Likewise, the practice of home burial is rampant because of neglect and poor maintenance of cemeteries which is seen as a dumping site for the dead (Omosulu and Ajegunmo; 2013). Also it is done to discourage theft and the exhuming of the dead body for money making by thieves (Olajide *et al.*, 2013). The indiscriminate burial within the residential neighbourhood and houses however has health implications. This practice can be very harmful to human health because of the risk of contamination of groundwater by microorganisms that proliferate during the process of decomposition of corpses and the later use of this water by the population. Wells are dug within the residential areas and can be contaminated by the toxin from decomposing corpses buried within houses or estate and likewise pipe waters too can be polluted most especially where there are burst water pipes (Pacheco *et al.*, 1991; Balogun, 2010; Basmajian and Coutts, 2010; Olajide *et al.*, 2013).

7.2.1 Types of CBOs and Roles of Participants

The predominant CBO involved in infrastructure development in the case study is the 'Landlord Association' although there are other CBOs comprising of small and medium enterprises, cooperative societies and professional association. These other CBOs are for traders and local trade men who are mainly interested in economic development of their members but do not participate in community projects.

> *"We tried to get other CBO's in our community to contribute towards the development of our community at least to contribute money since they work here in the community e.g. the welders and tailors' association. But they refused because they are also landlords and landladies[8] who are contributing in their respective communities"* ***(Community Leader, Alaba Layout; CL: 1)****.*

> *"…. Landlord Association used to be exclusively for homeowners/landlords and our meetings used to be occasionally just for familiarisation and relaxation purposes. However, since we began community projects, we started meeting monthly and have extended membership to include tenants-at least somebody must represent a residence […] we have a duty of care and provide mutual support to all our members including financial support if needed […]* ***(Community Leader, Awule GRA; CL: 18)***

All the CBO's selected are involved in various self-help projects, however this research focused only on road and water projects. Participants include the CBO leaders, residents (household heads) and youths. Residents are encouraged to join the 'Landlord Association' as the need for infrastructure supply increases and membership of the association is open to every household head notwithstanding their ownership status. The CBO's leaders are in charge of the administrative issues regarding community developments such as community self-help projects. They also provide moral support for community members and care for the welfare of residents. Residents on the other hand are involved in financial contributions towards the development of the community and also partake in manual labour such as cutting of grass by road side, filling up of potholes on the road etc. Table 7.2 shows the socio economic status of respondents.

[8] Landlords are private home-owners who own houses which may be owner occupied, rented or leased to others. A landlord is also a landowner. In this research 'Landlord' is use synonymous to home-owner.

Table 7. 2: Socio-Economic Status of Respondents.

Ownership Status		
Status	Frequency	Percent (%)
Landlord	43	71.67
Tenant	17	28.33
Total	60	100
Income Status		
Income	Frequency	Percentage (%)
Low	8	13.33
Medium	39	65
High	13	21.67
Total	**60**	**100**
Age group		
Years	Frequency	Percentage (%)
18-30	2	3.33
31-40	8	13.33
41-50	13	21.67
51- 60	17	28.33
61-71	14	23.33
Over 70	6	10
Total	**60**	**100**
Gender		
Sex	Frequency	Percentage (%)
Male	39	65
Female	21	35
Total	**60**	**100**
Marital status		
Status	Frequency	Percentage (%)
Married	46	76.67
Single	3	5
Divorced	11	18.33
Total	**60**	100
Occupation		
Occupation	Frequency	Percentage (%)
Civil service	22	36.66
Self-employed	11	18.33
Lecturing	17	28.33
Unemployed	10	16.67
Total	**60**	**100**
Origin		
Place of Origin	Frequency	Percentage (%)
West	36	60.00
East	12	20.00
South	7	11.67
North	5	8.33
Total	**60**	**100**

Table 7.2 showed the socio-economic status of respondents in the case study. This table revealed that most of the respondents are homeowners (71.67%) while 64.9% of them are civil servants working either with the state government or federal government

(FUTA). The table also show that 66.67% of the age group of participants fall within the working age bracket. This depicts that their participating in communal activities is because of the desire to access basic amenities. In these communities age is not a barrier to being a home owner as you are still expected to join the Landlord Association and to pay compulsory development levy. 76.67% are married while there are more male participants than women. The women would normally handle child care on meeting days, they however would join in the manual labour.

Table 7.2 also shows the state of origin of participants to be heterogeneous as most of the respondents are from Western (60%) and Eastern (20%) Nigeria while the remaining (20%) are from the southern and Northern Nigeria. Most of the communities are heterogeneous in nature especially in Aba-Oyo, Awule and Obaile communities due to their locations. Obaile GRA is the second oldest government housing estate established shortly after the creation of the state in 1976 and it is located close to the Federal School of Agriculture. It is approximately 4 kilometres from the main administrative area where all the state ministries and state house are located. This makes the Obaile GRA attractive to civil servants than many other state government establishments. The leadership of these landlord associations are either appointed by consensus or through voting as shown in Table 7.3.

Table 7. 3: CBO's Leadership Selection Process.

S/n	Community	Locations/Layouts	Leadership
1	Ijoka	Odopo Layout	Consensus
		Ilotin Layout	Election
		Abusoro Layout	Election
2	Awule	Awule GRA Zone D	Election
		Asuwamo Family Estate	Consensus
		Apatapiti II Layout	Consensus
3	Obaile	Fatuase Layout	Consensus
		Obaile GRA (zone A)	Election
4	Aba-Oyo- FUTA	Apatapiti Layout	Election
		Elekinran Family layout	Election
		Alaba Layout	Election
5	Omoniyi	Omoniyi Layout	Consensus

Residents' involvement in the decision making process starts with the selection of the leaders of these associations. Selecting the right community leader is very important as they are gate keepers and in charge of all decision-making process and access into

local communities. They are legitimate gatekeepers appointed by members of their CBO to oversee the affairs of their community and have local influence within their neighbourhood. They act as the go-between the community and government agencies to facilitate the development of their communities. They however operate differently from self-declared gatekeepers popularly known as 'Omo – Onile' who exploit members of the community and outsiders especially contractors, developers and government agents, therefore much care is often been taken to ensure the selection of leaders that will represent the community interests. Most of the communities adopted the same approach of democratic process, whereby interested members of the CBO have to campaign to be elected as leaders. Prior to this system, the leadership selection process used to be by consensus whereby the first settler in the community is appointed as the CBO leader especially where there was no traditional ruler. Such a person (usually men) occupy the post for as long as he is willing to serve.

The selection process was amended in many of the communities as they increased in size and with the return of democracy in Nigeria in 1999, many of the communities adopted the electoral process. The selection approach was modified and changed from obligatory to voluntary service and the post is highly contested as it is considered a prestigious position. Interested members within the community campaign for various posts and are voted into power by active members. Those regarded as active members are financial members whose records of payments are up to date. These financial dues constitute another avenue where landlord associations obtain funds for their development projects. Many residents join the association during the election period so that they can vote for their friends and relatives.

> *"My brother was appointed as the chairman of our resident association, I encouraged my friends who were building houses in our community to join the association even though they were yet to complete their construction. In fact, three of them did not move into their residence until four months after the election while the remaining four moved to theirs a year later" (**Apatapiti Resident; RI: 8**).*

Residents are free to vote for whoever they choose in a secret ballot that is later counted in the presence of all the residents present. The CBO's leadership is a voluntary work as they are neither paid nor remunerated, aspirants must be willing to work for the association for free. They however enjoy the prestige attached to the post as executives. These prestige includes recognition at community and state

programmes, special invitations etc. The executives are also in charge of all the decisions taken during the association meetings and in emergency cases. Likewise, they are often the intermediary between the key institutions either state-based or local-based and their respective communities. They also team up with other members of the associations or other CBO's leadership to form pressure groups to enforce governments to provide the infrastructure needs of their communities.

Another common factor to all the communities is the tenure of the community leaders, this is a two-year term. A good leader can in some cases stay as long as the members of the association deem fit. Some of the community leaders popularly known as 'chairman' have served for over five years. The chairman of Fatuase private residential estate in Obaile has been the association's chairman since the inception of the estate in 2001 when he moved into his residence. The association began with just five members but he was the first among the early settlers. Also Awule GRA (zone D) Leader was voted in and has been in office for more than five years. This is attributed to the improvements of infrastructure development his tenure has brought into the community. The study also revealed that the process of leadership selection is gradually been modified however the structure of the CBOs and the level of community participation still very much depends on the local perception of community participation.

7.3 Local Meaning of Community Participation

One of the main factors promoting community participation in the study area is culture and traditional practises. The understanding of local meaning of 'community participation' will expose the reasons residents engage in community self-help projects. The study revealed that community participation reminds participants of their culture and tradition thereby creating a sense of belonging even though many suburban dwellers are living far away from their original place of origin;

> *"I am a native of Enugu state in the eastern part of Nigeria while my husband is from the west which explains why we are living and working in Akure. I was born within a close knit community where everybody knows each other. We always do so many things in common and help each other as a community. Although I miss my native home, family and friends but the communal activities in this community alleviate any nostalgia I used to experience in our last place of residence. Through community participation I am able to relate with my neighbours, my children are happy to go out and play with other children. I am happy and feel at home living here even though I am not a native of Akure. In*

fact, I am just learning the Yoruba language which I could not learn in the last 10 years that I lived in our previous house" **(Ifelodun resident, RI: 27)**

Hummon (1992) and Ahmed (2011) are of the opinion that when residents are happy with their environment it brings about community attachment which inevitably brings about a greater sense of belonging. This further motivates residents to get involved in collective activities within their local community and brings about a local perception of community participation. Academic focus group defined community participation as the involvement of local community and residents in the development of their community. This is known by different local names depending on its purpose such as rendering assistances to friends, family and also community development:

"..... It is part of the tradition we were taught by our forefathers although they called it different names like 'Ifesowapo' (cohesion), 'Esusu', 'Aaro' or 'Owe'. That is why we have some of our wise saying like "Agbajowo la fi n so ya, ajeji owo kan ko gberu dori", or Òṣùṣù ọwọ́ la fi ńgbálẹ̀ tí'lẹ̀ fi ńmọ́. *This is our community, it is where we live and we have to develop it……"* (**FG2:1**)

The translation of '*Agbajo owo la fi soya, ajeji owo kan ko gberu dori*' simply mean 'you will need united hands to place and balance a load on a head', while *'Òṣùṣù ọwọ́ la fi ńgbálẹ̀ tí'lẹ̀ fi ńmọ́* mean only a bunch of broomsticks can be used to sweep the floor clean. These are popular idiomatic expressions emphasising community participation as a part of the culture of the Yorubas (the predominant tribe and language in the western parts of Nigeria) which is the location of this case study. The Yoruba culture encourages communal activity and association where several people get together to achieve a common purpose. This is also reflected in many more of their adage like 'Igi kan' o le di aginju' (a tree cannot make a forest) meaning a person cannot be regarded as a community rather a community is made up of several people living in the same location. Also there are different traditional indigenous groups and associations which encourage and promote community participation. Some of these groups are based on gender or age classification e.g. women association while others are formed to accomplish joint tasks within a local community. Some of these associations were mentioned by the focus group participants e.g. 'Aaro', 'Owe' and 'Esusu' etc. are all local cooperative groups or age groups.

‘Aaro’ and ‘Owe’ are men’s association known for rotational mutual exchange of services by members of such groups to carry out various tasks such as farming, harvesting, bush clearing, house constructions etc. ‘Esusu’ on the other hand is a traditional cooperative society where members periodically contribute money into a common purse which is then loaned to members on a rotational basis. It is a mutual way of helping members financially. This contribution is sometimes made weekly, monthly or on traditional market days which are days designated by traditional settlements for buying and selling. There is a strong belief in the power of communal relationship that is based on mutuality and trust in their day-to-day existence.

> *“…. We are expected to contribute money and also engage in manual labour like filling up of potholes on our roads with sand when they get really bad. Since the government cannot provide infrastructure for us, we resorted to community participation in order to alleviate some of our problem. Even the government is now encouraging community participation* ***(Participants; FG4:6)***

Furthermore, community participation is not limited to the Yoruba culture alone, most tribes in Nigeria have local words and sayings that depict community participation and it is now adopted as a method of informal provision of basic infrastructure facilities. Informal in that it is primarily the responsibility of government to provide these basic needs but this responsibility has been taken over by the community residents. There is nobody or organisation regulating this and also there is no planning permission for the projects. The efforts and resources of individuals and various community organisations are pooled together to accomplish community self-help projects. Sometimes the mutual efforts involve establishment of laws and rules which helps to enforce and guide the participation of community members. These rules help govern specific actions, responsibilities of community members and to outline things not allowed in the community. The fundamental principles of local participation in the case study is entrenched in the power of collective action; shared responsibility and strategy; fair play; mutual trust and ownership. The next section examines the decision making process and levels of participation of the selected communities.

7.4 Community Self-help Approaches

This section deals with the 'how' of community participation. It examines the strategies and processes used by local communities in Akure suburban areas to achieve their development goals. This include decision-making process, level of participation and sources of finance.

7.4.1 Decision Making Process

Decision-making is the involvement of residents in the administration and control of the developments of their communities. Decisions about community self-help projects are made during the community meetings except in emergency circumstances. Except for two communities, other Landlord Associations in the study hold their community meetings once a month, during the state's 'Environmental Sanitation Day' held every last Saturday of the month. Aba-Oyo's community meeting is every last Sunday while the Asuwamo women association meeting is every second Sunday of the month. The 'Environmental Sanitation Day', is a cleaning exercise established by the state government for residents of the state to clean their environs. On this day movement of any sort is restricted for three hours between 7:00am to 10:00am except for emergency services. Most communities chose this period for their community meetings and community projects work. There is no fixed location or place of meeting rather meetings are hosted by members as stated by the resident below;

> *"….. We always rotate it every month, we don't have a particular meeting point and we meet in each other's houses. We already have a roster showing names, dates and where and everyone knows that our meeting is always on the last Saturday of every month."* ***(Ijoka Resident; RI: 1****)*

Figure 7. 4: Awule GRA's CBO Leaders Coordinating the Monthly Meeting.

Figure 7. 5: Awule GRA Zone D Community Monthly Meeting

Figures 7.4 and 7.5 show Awule GRA community leaders and members having their monthly meetings at the community leader's residence. Most meetings are held using the mixture of English and local Yoruba languages which is the predominant language spoken in the western parts of Nigeria. Minutes of last meeting and reports of previous projects are usually considered before any matters arising, the meeting agenda or decisions. During the meetings decisions are often jointly made by the executives and the community members. This is done by a general consensus, voting and executive approvals. Figure 7.6 shows the decision making process for all the communities.

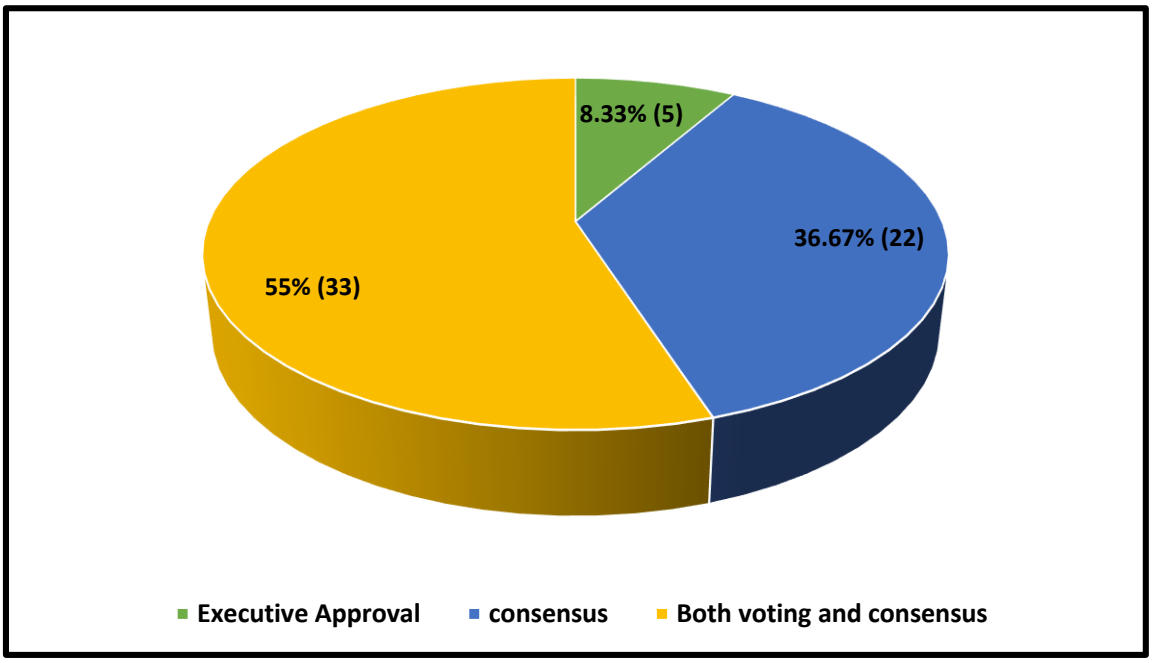

Figure 7. 6: CBO's Decision Making Process

55% of residents interviewed stated that their CBO's make use of consensus and voting while 8.33% of the decisions are made by CBO executives. In Awule and Aba-Oyo- FUTA communities' I observed in the CBO meeting that decision making process is through consensus and voting and this was confirmed by the community leader;

> *"The CBO secretary usually prepare the meeting agenda and normally will discuss it with me before every community meeting. We are very open in our meetings and everybody is free to share their opinion regarding any issue. We may argue and sometimes quarrel but we always make sure we reach an agreement…* **(Community Leader, GRA; CL: 14)**

Issues are raised and discussed during the monthly meetings until members agree on a definite plan, but when consensus is difficult or impossible to reach, votes are cast

in order to arrive at a conclusion. All member's present in the monthly meetings are involved in the decision making process as much as possible irrespective of their gender. I did observe that every issue raised in the meeting were well debated by members before decisions were taken. However, in Obaile GRA (zone A) decision making is mostly the responsibilities of the CBO leaders;

> *"….in the past we use to encourage general meeting in order to foster neighbourhood alliance, residents don't respond to call for meeting except for few residents because they are too busy. In fact, many of our residents are commuters who wants a quiet weekend with their family. Although if there is a dare need to meet, we do call for general or zonal meeting****….*** **(Community Leader, Obaile GRA; CL: 14)**

In most cases decision making is based on executive approval because they don't have regular CBO meeting. Obaile GRA has four residential zones and there is a central executive in charge of most decisions and administrations in the estate. They comprise of all the chairmen and secretaries of each zone whose responsibility it is to disseminate information and decisions taken at the central executive meetings. In other communities there are times community leaders have to make quick decisions especially in an emergency but they usually give reports of such in the next community meeting.

It was noted that vulnerable groups are often neglected in decision–making process even though some of them may be financial members. This contradicts the true meaning of community participation which is the involvement of every individual in decisions about issues that affect their lives. Li (2006) and White (1996) are of the opinion that community participation should lead to a fair sharing of power and higher level of involvement in particular the vulnerable groups. The common practise is that decisions taken in the community meetings are binding on all residents and members of the association which therefore questions the place of equality. Some residents desire to participate but simply could not attend the monthly meeting due to old age, bereavement or sickness and they are never consulted or informed of decisions taken:

> *"…I am an old woman of 75 years old and recently lost my husband. I have not been able to attend the community meeting for some time even though it's held in my neighbour's house which is just three houses away from my house. This is because according to our culture I must stay indoor for 3 months mourning my husband, meaning I must not go out of my house for the duration of a*

minimum of 90 days or attend any public function [...] I was not informed of a contribution but all I got was a notice that I had defaulted and my electricity supply will be disconnected because I am owing the association money for a transformer. I was not consulted when the decision was being taken nor was I informed afterwards even though my late husband and I were active members of the association […]" ***(Ijoka Resident; RI: 29)***

This was further corroborated in the focus group discussion, as most of the communities do not have any provisions for vulnerable groups rather they focus mainly on meeting attendees nevertheless decision taken are binding on all. Not every resident has the physical capability to attend monthly meeting but they desire to participate in the decision making process;

"…. I used to be active in the community meeting until I went blind due to glycaemia in 2009 and since then I have not been able to attend meetings regularly. I believe there should be a provision where our opinion can be consulted because sometimes decisions are made which I am not aware of but it is binding on me, there are some levy I have had to pay which I felt was too much but because I could not be present in the meeting, I had no choice. My house is the last in the street, when the last community drainage clearing project was done, the drainage in front of my property was left out. I had to employ people to help me clear my drainage despite paying the community levy, and when I had the opportunity to protest to the executive I was told that nobody informed them that my area was affected.... ***(Participant, FG1:10)***

Both interviewees above are of the opinion that effort could have been made by the community or CBO leaders to involve them in the decision making process since the community associations are aware of their conditions and the fact that they are financially committed. Respondents felt they should have been consulted preceding every meeting either in writing or through telephone to obtain their opinions on matters arising and decision taken in meetings should be properly communicated. They can possibly vote by proxy instead of just been informed and it will ensure that no members of the association feel neglected. Rather they are of the opinion that most decisions taken in their CBO meetings are just opportunity to 'rubber stamp' previous decisions taken by their leaders;

"We were told by the chairman just in the last meeting that the community will contract out the grading of the roads. However, they started grading the roads two days before the meeting and as usual they started with the chairman's street. Some of us left the meeting angry because it appears that the decision was already taken. They should have waited for us to debate the issue before commissioning the project out because we noticed it is the same contractor that

graded the road last year and many of us complained that he did not do a good job yet they gave him the contract again…." ***(Abusoro Resident; RI: 21)***

The method for sharing of information needs to be improved as only members in attendance have access to decisions taken during community meeting. Also except for Awule GRA (zone D) the remaining communities do not communicate decisions in writing. Minutes of meetings and agenda are distributed during the monthly meetings. There are no formal complaint procedures against decisions taken. Refusal to make financial contribution is the only means of protest and showing dissatisfaction to outcome of decisions. Community participation should encourage freedom of speech and rights of participants to voice their opinion without any fear.

7.4.2 Levels of Participation

The level of participation was considered based on collective activities within the private residential layouts and the government residential Areas (GRA's). There are various levels of involvement in community projects, the most common ones within the study area is functional and interactive participation where residents involve in decision making process. They are involved from conception throughout the implementation and also take part in management while non-participation is the least. This is where residents are neither involved in decision making nor attend community meeting and White (1996) consider this type of participation as nominal participation. Although the level of participation varies from one community to the other, the Abaoyo - FUTA communities are better organised than the other selected communities in other private layouts. This could be attributed to residents' level of education and its proximity to the university as many of the residents of these communities are either staff or students.

Table 7.4 revealed that 63.33% (38) of respondents are involved in community self-help projects right from the decision making up till the implementation stage. Planning, funding, manual labour, and delivery of developmental projects in their neighbourhood. 18.33% (11) of the respondents were merely informed about community projects however they do not get involved in the implementation.

Table 7. 4: Level of Participation of Respondents.

S/n	Communities	Layouts	Level of Participation			
			Non Participation	Informed only	Project Implementation	Conception through Implementation
1	Ijoka	Odopo	1	3		1
		Ilotin	1	2		2
		Abusoro	1	1		3
2	Awule	Awule GRA Zone D				5
		Asuwamo				5
		Apatapiti II	1		2	2
3	Obaile	Fatuase			1	4
		Obaile GRA (zone A)		4		1
4	Aba-Oyo-FUTA Area	Apatapiti Layout			1	4
		Elekinran			1	4
		Alaba			1	4
5	Omoniyi	Omoniyi		1	1	3
	Total		4	11	7	38

In comparison, there is active participation in Awule GRA community while participation in Obaile GRA is passive even though they were both established in the same year. Awule GRA was established as a site and service scheme while Obaile comprised of both site and service scheme and public housing scheme. The housing scheme were prototypes of two and three bedroom bungalows and four bedroom duplexes. Majority of the residents of Awule GRA are middle income earners who are mostly government workers. On the other hand, Obaile GRA is a gated estate for the wealthy and the residents are largely politicians and senior government workers who do not have the time to attend local community meetings or participate in manual labour or other community activities.

> "*We don't have regular meeting in our zones because most of our members travel a lot, in fact the many of the homes in the estate are used as country. The only time we see many of our members is during the association's annual Christmas party [...] Usually a member of the central executives or delegate only come round to collect the security levy once a month during the environmental sanitation. The main estate gates are often closed on that day by central executives for some hours after the environmental sanitation exercise in order to collect money from debtors. […] whenever there is any need for contribution for repairs and damages they inform residents either in writing, by word of mouth and sometimes through telephone. Representatives usually go from house to house to collect the levies although most times we were never given feed backs on how it was spent […]*" ***(Obaile GRA Resident, RI: 28)***

Residents of Obaile GRA are passive participants whose involvement is limited to information sharing and perhaps financial contribution. Arnstein (1969) considered this as a degree of tokenism and White (1996) further explained that participation limited to information sharing only often limits active engagement because people are just told of what took place and what the CBO leaders decide. Another reason for the non-participation in Obaile is the fact that the GRA used to have good road networks and potable water supply. The estate is the second best government housing estate in Akure city with provision of asphalt road covering and water supply within the residences, but due to poor maintenance potable water is no longer available in the estate. Obaile GRA is predominantly a residential development where the high-income groups who desire to be categorised as elite and exclusive relocate to. It's governed by rules and administrative teams and was created as a gated community with all other social amenities such as school, shops, etc. (Figure 7.7). The *"Two important facts can be emphasized related to gated housing estates; the first is that gated housing estates generally offer a particular lifestyle, and the second is that they provide security, which is the argument used as the primary reason for being gated".* (Topcu, 2013, p. 156).

Figure 7. 7: The Main Entrances into Obaile GRA.
Source: Google Earth accessed in 12.07.2016

Top left: Obaile GRA 1ST gate
Top right: Obaile GRA 2nd gate
Bottom: Satellite map of the old layout that was the original developed as housing scheme

The appeal of Obaile GRA as a gated community is based on the promise of privacy, safety and uniqueness where residents rarely have to leave the housing estate, except when commuting to work. People choose to live in Obaile GRA because they want to be around people like them and have freedom from the uncertainty of the outside. The promise of safety was compromised with addition of other layouts to the original Obaile GRA with other access entrances into the housing estate. The Obaile CBO have paid private security men guarding the estate mostly at night while there is a police station

within the estate. The Awule GRA on the other hand does not have any gate at the main entrance (Figure 7.8.) because the main road is classified as an urban road which also serve as major access to several private layouts all around the GRA and it is a major link to the urban centre private layout located adjacent to Obaile estate.

Figure 7. 8: The Main Entrance to Awule GRA.

There is much difference in the level of participation between Obaile GRA (Zone 4) and Awule GRA (Zone D). Most of the respondents in Obaile are not actively involved in communal activities (4) while all the respondents in Awule GRA (Zone 4) are actively involved from the conception (decision-making) to implementation). This is largely due to the poor state of infrastructure provision in Awule GRA, which is no better compared with provision in the surrounding private layouts. The study revealed that as a result of deprivation, residents of Awule GRA and the private layouts in the case study resorted to functional participation which sometimes involves diplomacy, placation and consultation not withstanding their level of education as shown in Figure 7.9. Most of the respondents in Abaoyo – FUTA Areas (11), Awule (10) and Obaile (7) have tertiary education. (See Figure 7.9)

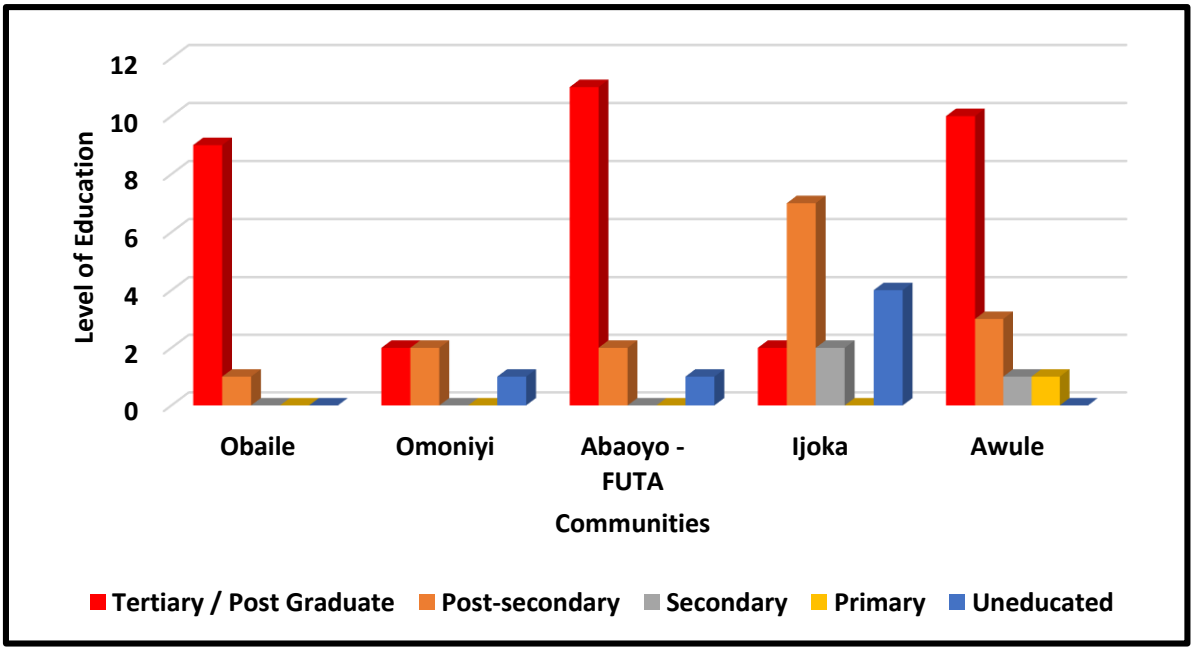

Figure 7. 9: Level of Education of Respondents.

However, in a low income area like Ijoka community, literacy level is a major factor affecting resident's participation in community projects. Any resident that is too inquisitive or queries leadership decisions is usually labelled as problematic or as an antagonist. The interviewee below stopped attending community meetings because he was being ridiculed because he usually challenged his CBO leaders to be transparent and accountable. He is a University lecturer and an accountant by profession while most of the other CBO members are retirees, semi-illiterate, farmers and market traders. The interviewee sees himself as out of place as a result of his level of education;

"*I stopped attending the community meetings because I don't like been ridiculed and I hate name calling. I don't like cheating at the same time I make sure I pay my development levy; I expect the community leaders to give an account of how the money was spent however my opinion is often ridiculed by other members. It got to a point that whenever I make any comment in the meeting, others members snicker and laugh calling me names like 'over-sabi (Overconfident), kasala (trouble) or 'kofeso' (professor) simply because I am the most educated in my community, and my opinion often differ. It is, not that I am deliberately being difficult, I just felt that if I am paying my association dues and levies it is my right to know how it is being spent. Since others don't like this, I'd rather stay in my house for the sake of peace…*"
(Ijoka Resident, RI: 30)

Participation is mostly about redistribution of power and control of the local participants, but in a low income community, a resident or elite is sometimes regarded as an outsider especially if seen to challenge the authority of the community or CBO's leader.

White (1996) is of the opinion that information sharing is just a token representation which in most cases has no real power and cannot enhance community participation. There is need for consultation both at the community level and also with the key institution before there can be active participation. All the communities seem to agree on the issue of neglect by the state government agencies and that they are never informed of any project or involved in the decision process.

All the CBO leaders affirmed that government officials do not involve them in decision making process regarding government infrastructure projects within their communities. In most cases the CBO leaders were only informed of projects by the contractors at the commencement of a project or mobilisation of equipment's and workers to the construction site. Unlike developed countries where planning permit involves rigorous consultation with residents and anybody a proposed project will affect. Generally, in Nigeria, contractors are granted automatic planning permits at the award of contracts for projects while public consultation is only carried out where there is need for government to pay compensation for revoking a leasehold interest or demolition of property provided the property owners have Certificate of Occupancy. In which case affected individuals are usually informed by town planning office of the need to pull-down properties that contravenes the planning law such as building over road setbacks. This sometimes results into conflicts as members of CBOs expect their leaders to be privy to such information especially if the public projects are going to affect their daily activities or livelihood.

This study further shows that inadequate and poor mode of dissemination of information regarding government projects are major hindrances to community participation especially interaction between key government's institutions and local communities and among the CBOS as well. While most CBOs limit information sharing to meeting attendance, word of mouths and text message. It is only Awule and Aba-Oyo - FUTA communities that also include letter writing. A lot of information is lost and many residents have no access to decisions taken in community meetings. As an example, the interviewee below was denied access into his residence when he returned from work because a ditch had been dug across his gate. He was unable to attend the last landlords' meeting in his community and therefore was unaware of the date of commencement of a community drainage project.

> *"Most time we complain that government does not inform us of any project in our community yet we do the same thing! I came back late from work and found a large hole dug across my gate, I was surprised and asked a petty trader beside my house who informed me that this is a community project which started in the morning after I had left for work. I could not attend the last meeting due to a family commitment and I sent my apology yet nobody informed me of the time the project will start. It is not a bad project because we had been deliberating on it for some months but I did not know it was going to start on that day. I had to park my car on the street and I woke up the next day to see my car door vandalised and when I complained to the CBO executives, there was no apology rather they accuse me of not attending the monthly meeting. I could not park my car in my compound for a month and had to spent money to repair my car. Yet we always blame government for lack of communication when our CBO leaders are not better!"* (***Ijoka Resident, RI: 13,)***

This further buttresses the need for effective method of information dissemination as none of the CBOs have notice boards or information stands. These could be provided at major locations and junctions especially at popular bus stops for example the 'Okada' (motorbike transportation) parks. Many of these communities have such parks at the major entrances or junctions in the communities and this will help in disseminating information.

7.4.3 Women Involvement in Community Self-help Projects

In all the communities, women are actively involved in community participation and they often encouraged their husbands to join the Landlords Associations. In the case study there is only one CBO that is exclusively for women (see Figure 7.10) The Asuwamo Women Association was formed specifically for collective efforts towards the development of their community. The women meet regularly once a month to discuss issues concerning the development of the community and also their personal welfare. They rotate the venue of meetings among members and meetings are usually held in the host's sitting room as shown in Figure 7.11.

Figure 7. 10: Members of Asuwamo Women Association and the Researcher.

Figure 7. 11: Asuwamo Women Association's Monthly Meeting and Focus Group Discussion.

Many of the women became friends when they came to live in the community and through their new relationships, these women initiated a collective action group in their community even before the community landlord association was ever established. This action challenged the men because it is not in the Yoruba culture for women to be at

the forefront of decision making. Rather women are usually relegated and are expected to abide by the decisions made by men. Also in many cultures in Nigeria, women are not allowed to inherit landed properties however with the arrival of western education, this is gradually changing as many women are now able to build houses as property owners popularly referred to as landladies. Women are also perceived to be more proactive than men, this may be because they stay more at home than the men and so are more affected by the need for these basic infrastructures. Its availability will help ameliorate their duties both as wife and mother. For example, water is needed for food processing but how the women went about it in most cases does not bother some men, rather all they expect is to find their food on the dining table when they get home from work. A lot of times it is the women that call for collective efforts towards the provision of basic amenities in their community as stated by focus group participant below;

> ***"……****most of the time we are the ones at home while our husband goes to work and even those of us that work spends more time at home than the men. Therefore, we are the one that suffer when there is no water or electricity. We need water to wash cloths and make food. Therefore, unless we get involved in the development of our community our men may not bother. Most of the time the main agenda for our meeting is always community development. This is what brought us together to form the women association, infrastructure is always the first issue we discuss in our meeting. For three years it was the women that contributed the money for the grading of our roads, we also sent some of our members to the local government, ministry of works and Water Corporation for assistance before the men joined us. We rotate the provision of refreshments for the men during community exercise and meetings. Sometimes we even joined in the work like filling up sand bags, sweeping or cutting grass. We always cook food for any contractor employed by the community leaders. We also plead with our members to go along with their husbands to the community meetings so as to support them …." **(Asuwamo Women Association, FG1: 1).***

Apart from women associations, many women are also involved in other CBO's in their communities and their presence has helped to ensure consistent participation. I observed that many wives often went with their husband to the community meeting or sometimes represent their husband. They also participate in the manual labour, they provide refreshment for the men while they work and also join in the physical exercise like helping the men to fill sand bags that are used to block the erosion gullies and potholes. The women contribute money among themselves which is given to the men to add to the total cost of self-help project. Apart from community projects, members

of the women in the study area also render assistance to each other such as giving out loans, childcare, carpool to school and work etc. One of the attributes of the suburban areas is that friends and families usually build and live in the same neighbourhood and this makes it easier to render assistance to each other as neighbours.

> *"Six of my neighbours are my friends and colleague, our children attend the same primary school. We are nurses and sometimes we are required to do different shifts but since I came to live in this community two years ago, we have been able to arrange that two of us are available to drop and pick the children from school. In that way we spent less money on fuel and also assist those that don't have a car […]"* ***(Participant, FG1:11)***

Part of the advantage of community participation is cohesion. It helps to shape and sustain neighbourhoods. In the study area, women are at the forefronts of integration, they easily form and sustain interrelationship more than the men. They easily form rapport with their neighbours when they meet at their children's school, market, doctor's place or in churches and through this their husbands also become friends. These friendships help provide the structure needed to promote community participation such as contribution to construct fences and drainages in front of adjoining properties, giving water to next door neighbourhoods, informal cooperative funding etc.

7.5 Affordability of Community Projects: Sources of Finance

Infrastructure development requires huge capital depending on the type and nature of the projects been undertaken, whether private or public. This section assesses community affordability of road and water infrastructure since community self-help projects are mostly funded from communal fund. Finance for community self-help projects are sourced through voluntary contribution; monthly levies; special projects contributions and compulsory community development levies paid by new house owners. Most of the community associations in the study rely on compulsory development levy and monthly contributions from members to finance their projects.

7.5.1 Compulsory Development Levy and Monthly Contributions

This is a fixed amount of money paid by new home owners (landlord) in the study area. This is a levy paid to the landlord association and not the Government. It is a different form of levy apart from the tenement rate which is paid to the local government. This money is used for the provision and maintenance of basic infrastructure in the community. Table 7.5 revealed that Asuwamo and Ifelodun Landlord Associations charges the highest development levy of ₦25, 000 (£101). Other community's charges

between ₦15, 000 (£60.67) and ₦20, 000 (£80.90) while Omoniyi layout charges the lowest levy of 10, 000 (£40.45).

Table 7. 5: CBO's Monthly Contributions and Compulsory Development Levy.

Community	Locations	Monthly contribution		Compulsory development levy	
		Naira (₦)	Pound (£)	Naira (₦)	Pound (£)
Awule	Awule GRA (Zone D)	500	2.02	14,500	58.65
	Apatapiti II Layout	-	-	18,000	72.81
	Asuwamo Estate	-	-	25,000	101.13
	Asuwamo Women Association	200	0.81	-	-
Ijoka	Ilotin Family Layout	-	-	15, 000	60.67
	Abusoro Layout	200	0.81	15, 000	60.67
	Odopo Family Layout	-	-	15, 000	60.67
Abaoyo-FUTA	Ifelodun family Layout	700	2.83	25, 000	101.13
	Alaba Layout	200	0.81	20, 000	80.90
	Elekinran Family Layout	200	0.81	25, 000	101.13
Omoniyi	Omoniyi Estate	200	0.81	10, 000	40.45
Obaile	Obaile GRA (Zone A)	2, 000	8.09	-	-
	Fatuase Family Layout	200	0.81	15, 000	60.67

Apatapiti II, Asuwamo, Ilotin and Odopo communities do not collect monthly contributions rather the main source of finance for community projects is the development levy:

> *"Our leaders tried to introduce monthly contribution because they felt that it may be easier to pay smaller amounts but members voted against this because of the compulsory levy they had already paid. I understand their reaction because after paying so much for the compulsory levy many of us are not ready to have any further financial commitments. More so where accountability is zero-many of the residents cannot really afford more payments …" (**Apatapiti II Resident, RI: 2)***

> *"[…] before I became a community leader, members used to make a N100 monthly contribution which a lot of people couldn't afford to pay. In fact, many of the CBO members stopped coming to meetings because of their debt. So when I became the chairman of the association three years ago, I stopped the monthly contribution and since then attendance has improved. We cannot force people to pay the money that they don't even have!" **(Community Leader, Ilotin Layout, CL: 7)***

These communities believe that most old members are the highest defaulters while the new homeowners pay up this levy because of the need to make use of the existing infrastructure, it is difficult to chase the older landlords for unpaid monies as they are

already beneficiaries of these amenities. Residents of Obaile GRA on the other hand rely on voluntary contributions. New homeowners are notified of the amount for development levy by sale agents and owners of the private residential layout at the point of purchasing their plot of land. Others are informed by other residents or CBO leaders while constructing their houses. Most residents are aware of the amount to be paid and the implication of not paying before moving into their residence. Most of the residents' delay payment till they move into their residences but every property owner must pay the levy.

> *"…. Whenever new homeowners want to connect electricity to their houses, they must pay a compulsory development levy of N25, 000. I knew about the levy while I was constructing my house because some neighbours came to congratulate me and told me about the levy. I started paying in instalment a year before I move into my residence […] my neighbours who refused to pay the levy since he moved into his house a years ago has had to pay huge amount of money to reconnect his electricity three times…."* ***(Asuwamo Resident, RI: 3)***

The same method of enforcement is used against defaulters in all the communities. One of the ways this is done is by preventing construction vehicles from delivering building materials to the sites of defaulting new members. In some cases, as a last resort they may be prevented from connecting to the community's transformers and electricity poles as buying a personal transformer is an expensive venture. Apart from the disconnection of electricity supply, blocking of road and locking up of the main estate gates may also be used where there is a gate. Usually sufficient notices and reminders are given to debtors before the commencement of any of these actions. At the beginning of each month, the CBO leaders go to landlords to remind and encourage them to pay up all outstanding levies. A neighbourhood watch is also in place to report the arrival of new home owners and to report cases of illegal connections electricity source to the executives. Figure 7.12 below shows disconnected electric cable from a defaulters' houses in Awule GRA community.

Figure 7. 12: Disconnected Electric Cables from a Defaulter's House.

The CBO committees are empowered by its members to enforce payments and to administer any sanctions deemed to deterrents. Defaulting members are given enough verbal and written notices, reminders and warnings before any of this is carried out. However, residents are allowed to negotiate the payment in order to avoid any of these penalties. The three communities of Asuwamo, Elekinran and Ifelodun pay the same compulsory levy because they are within the same neighbourhood and they also encounter similar problems of the rocky terrain demonstrated in Figure 7.13. It is common to see residents breaking rocks before constructing the houses.

These communities spent huge amount of money to remove boulders on the community roads in order to gain access to plots and residences. It is an on-going process and part of the rocks rubbles are used to fill up the erosion on the road. However, despite community efforts, the roads are still very bad and further compounded as a result of lack of drainage. The duration of community meeting is usually once a month (2 hours) and immediately after the meeting, members are mobilised for community manual labour which includes removal of small rocks and pebbles on the road; and filling up erosion gullies with sand bags. It is not unusual to see members challenging defaulters who fail to pay the compulsory levies especially if they refuse to participate in communal labour.

Figure 7. 13: Showing Sand Bags used for Erosion Control in Elekinran Community Road.

Top Left: Elekinran Residents used sand bags and stones
Top Right: Apatapiti used sand bags to fill up deep erosion holes
Bottom left: An Alaba resident used sand bags to control flooding which also serve as barrier preventing the sand from been carried away by rain water.
Bottom Right: Asuwamo residents used grasses to fill up erosion gully while the sand bags have been washed off

The study revealed that most CBOs prefer the compulsory development levy because it is easier to enforce residents to pay the levy compared to monthly contributions because of the strict enforcement measures and it is not optional;

> *"My neighbour informed me about the importance and the need to pay my development fee. I was aware of the levy but I thought I could pay it later but I was informed that unless I pay the levy, I will not be allowed to connect electricity*

from the transformer to my house. The alternative for me is to pay the compulsory levy and not the monthly contribution. I am owing up to six monthly contributions, I complained to my local government councillor but he told me that he too paid the same levy……." **(Participant, FG2:5)**

The communities that do not charge development levy rather they rely on monthly contributions from members. Homeowners or household heads are required to pay monthly contribution between ₦200 - ₦2, 000 (£0.81 - £8.09) in Akure suburban areas as shown in Table 7.5. This amounts to annual contribution between ₦2, 400 – ₦24, 000 (£9.72 – £97.08). The highest monthly contribution is paid in Obaile GRA (zone A) (₦2000) (£8.09) because it is the only source of finance for community projects. Homeowners/landlords are required to pay the monthly contribution but where a landlord does not live in the property, the money will be paid by tenants or shared among multiple tenants.

The study further revealed that most of the CBOs executives do not reveal records of monthly contribution and expenses to other members, they claimed that contributions are spent as members pay up. But CBO leaders in Awule GRA give quarterly financial reports of their incomes and expenditures because the financial secretary is a chartered accountant. He also presents end of the year financial reports in the first meeting of the year which allows other members to assess their performance;

"Since four years ago, we always include financial reports as part of the end year activities and it always include the member's payment records. This has encouraged many of our members to pay their levies and contributions. I also give a quarterly report which shows members' up to date financial records. This method has helped in increasing our source of finance as members are well informed of the association financial status. In fact, most of voluntary monetary and material contribution are made after the deliberation of income and expenditure because members are able to see clearly the need of the community…." **(Community Leader, Awule GRA; CL: 3)**

Most of the communities' leaders are secretive about their financial record and the actual amount spent on community self-help projects. They claimed that the record of their expenditure is not for public consumption however CBO leaders in Awule GRA (zone D) was willing to release their financial record between 2008 and 2011 as shown in table 7.6.

Table 7. 6: Showing Summary of Financial Record of Awule GRA Community.

Years	Income (₦)	Expenditure (₦)
2008	790, 700	497,400
2009	413, 500	536,500
2010	465, 500	545,200
July 2011	284, 600	279,000
Total	1,954,300	1,858,100

Source: Files of Awule GRA Community Association (2011)

At the time of the fieldwork, financial record was only balanced up to July 2011. The community had the highest income in 2008 because about 45 new houses were built during that period. This was attributed to increase in minimum wages and the salary of university lecturers. Most of the new homeowners paid their development levy while the remaining income was from monthly contribution and voluntary donation. Table 7.7 shows the breakdown of the expenditure for the association. The community did not spend any money on water projects.

Table 7. 7: Awule GRA Expenses between 2008 and 2011.

COMMUNAL PROJECT	EXPENSES	
	NAIRA(₦)	POUND (£)
Electricity	1,018,100	3,516
Road	500,000	1,726
Security	250,000	863
Welfare	90,000	310
Total	1,858,100	6,415

Source: Files of Awule Community Association, (2011)

Transparency helps to promote trust and increases commitments among residents and it is also providing a way of measuring local community initiatives. But the secrecy of financial records and poor documentation of means local community initiatives inputs to infrastructure development will always be discounted and it is important for policy formulation, researches and assessment of community participation. Lack of documentation sometimes occurs due to poor capacity building within the local community as many of the participant have no prior knowledge about book keeping and administration. They rely on their experience and intuitions and usually cover up their ignorance with excuses.

7.5.2 Voluntary Contribution

Voluntary contribution is usually gifts in form of material or financial donations from members of the community and philanthropist. Some community members in the case study see communal projects as a way of expressing their beliefs and furthering their political ambitions. It is therefore common to find one or two individuals making contributions either in cash, materials or manual labour. Other members by virtue of their positions within the community either as a community or CBO leader are compelled to make voluntary contributions especially in an emergency. Sometimes when there is an urgent need and it is impossible to call for a meeting, most CBO leaders see it as part of their responsibility to find urgent solution without necessarily calling for a meeting;

> *"The community projects are sponsored by the members. We have levies for examples people moving into the community are made to pay certain amount in order to have access to electricity and other things in the community. That's way it's been funded. Occasionally when there is a need or emergency and no new people moving in, we call a meeting, get the estimates and divide it by the number of houses and levy ourselves. I oversee all the decision in the meetings and the development of our community, in fact on most occasions; I do spend my personal money for projects even without involving or levying others because I count it as a sacrifice. Where there is any dispute I mediate in conjunction with my other executives and also represent the community in any official engagement…"* ***(Community Leader, Omoniyi Layout, Cl: 12)***

> *"[…] I know spending of personal money can be tiring sometimes as community members always expect CBO's committee to resolve every issues. Many of us are civil servant and we also rely on our salary which is why I cannot blame the past leaders for their actions after all, when your tenure is over the next leaders has to be in charge […] although we should not relent our commitment but it is the situation of the economy […]"* ***(Community Leader, Awule GRA (zone D; CL: 19)***

This study however revealed that some of the leaders stopped making voluntary contributions as soon as their tenure is over as their commitment is reduced to the usual obligation of residents. Therefore, the amount generated from this source of finance is often limited. Some residents like the respondent below make voluntary contribution out of personal motivation and beliefs. He is of the opinion that government cannot provide all the needs of his community, he therefore contributes towards the development of his community. It could be possible that he is nurturing his political ambition but he is using his profession as an electrical engineer to help his community. He is a self-employed certified electrical engineer and has access to materials and

manpower which could be used to improve the infrastructure within his community. He changes spoilt electric cables and poles, provided street lights powered with his personal generator, repaired the community access road and also supplied potable water for the community through the bore hole dug in his house.

> *"…. When I came to live in this community in December 2004, the road to my house and the main access road to the community was very rough and bad. It had lots of potholes and at that time I was riding a motorcycle. One day on my way home from work I saw a road grader working in a nearby community. I approached the operator to find out the cost of grading and was told that it will cost ₦8000. Meanwhile my community leader had earlier paid out ₦15, 000 for the grading of the road our community road which was poorly executed. I personally paid the Eight Thousand Naira (₦8000) for the grading although some members felt I shouldn't have paid the money since I was not owning a car at that time I told them one good turn deserves another and that God will provide my own car and within six months I bought a car."* ***(Odopo Resident, RI: 1; 2011)***

Other residents also make voluntary contribution based on their capacity and needs. The resident in the interview below bought poles and electrical cables to connect electricity to his house. The same poles were used by other residents on his street to connect electricity from the electric mains to their various houses. He also championed the contribution and construction of a culvert over a drainage blocking the road access to his street as shown in Figure 7.14. Those who could not make monetary contributions were asked to provide material or manual labour.

> *"I organized some neighbours to contribute towards the grading of the road and construction of a culvert across the drainage in our street. We contributed ₦15, 000 per house except a neighbour who is a bricklayer. He could not afford to pay the agreed amount but choose to do manual labour but at the end of the day he disappointed us, he did not turn up for the work and people had already contributed and I must not disappoint them. So I had to pay extra money to employ an additional bricklayer for the job"* ***(Apatapiti II Resident, RI: 2)***

Figure 7. 14: Culvert Construction through Voluntary Contributions.

Voluntary contribution is never enough for community project as it hinges on the goodwill of residents and philanthropist. It is not a constant source of finance and most communities still have to collect special development levies to supplement other sources of finance.

7.5.3 Special Levy and Loans

Special levy is another method used by communities to raise fund for community projects. This is usually a fixed amount for specific projects. The amount is usually derived by sharing the total cost of the projects by the number of households within the community. Most times community leaders collect special levies for projects that involves huge capital outlay or unexpected expenses such as repair of the transformers, flooding of road, damaged overhead water tanks etc. Most special levies are named after the project been executed, for example 'security levy' which is collected by all the communities to pay private security men employed to guard the communities. At the end of the month the community executives or their representatives go around knocking on resident's door to collect the levy. It is also known as *"Owo Olode"* meaning money for security men. Special levies are not the

sole responsibilities of the landlords or land owners rather all household heads or residents living within the communities are expected to pay the levies irrespective of their status or position.

Loans on the other hand are funds borrowed from individuals to finance community projects. The study revealed that some CBO leaders are forced to obtain loans and construction materials on credit from some members of the community which are then paid back as soon as community members pay their levies or contributions. Most of the CBO leaders try to avoid loans because at times it difficult to get enough funds to pay back. In Awule GRA, the chairman of the landlord association borrowed ₦498, 000 (£1661) from some community members to pay for the first phase of electricity installation and grading of the major road in the community. The money was paid back over the period of five months

> *"The government provided us with concrete poles and asked us to buy other materials and to do the installation by ourselves. The installation was divided into two phases because of the huge financial implications which the association could not afford. While we were looking for money a member of the association had a terrible accident when her motorbike ran into a pothole covered by rain water. She was unconscious for many weeks and broke her leg. We had to borrow some money and also collected some cement and electric cables on credit. We were able to pay back within 5 months as members pay up their development levies…."* ***Community Leader, Awule GRA; CL: 18)***

7.6 What are the Projects?

This section assesses the contribution of community self-help projects to adequacy of road and water provision within the study area. Apart from Obaile GRA, many of the residential layouts in Akure suburban areas are newly subdivided plots located on lands converted from agricultural use. These are now evolving into residential areas with no provision of infrastructure. The first infrastructure required is a road network which is needed to access the plots and residences. It often starts as a footpath and as the development progresses so also will there be the need for a motorable road for supply of construction and building materials and later resident's vehicles. Water supply is also highly demanded by residents firstly for construction work and later for domestic uses. These two infrastructures are very important and there is an increasing demand for their provision in the suburban areas of Akure.

7.6.1 Community Road Projects

Accessibility is the ease of the local residents' ability to reach various places and desired activities with ease (Gutiérrez *et al.*, 2010). But without adequate road network it will be impossible. Community roads provides access to hospital, schools, market, neighbouring communities etc. The availability and maintenance of these road have great impact on the well-being and socio-economic development and transformation of the suburban communities. Local community contributions to the development of road infrastructure in Akure suburban areas are limited to 'trunk C' roads and few available trunk B roads. Trunk C roads are the local access roads within the communities while trunk B are urban roads connecting various communities in the same axis with the city centre. The classifications of these roads were discussed in details in chapters 5. Apart from Obaile GRA, all the remaining communities do not have asphalt covered roads except for the urban roads connecting the communities with the city centre.

There are only three urban road networks in the study and they all have asphalt covering. These are Obaile-Airport road, Awule-FUTA road and Ijoka road. The Obaile-Airport and Awule-FUTA roads have been awarded for reconstruction by the state government and was discussed in the previous chapter (chapter 6). On the other hand, Ijoka road is overdue for resurfacing and maintenance. Ijoka road has many bad portions with huge potholes at the side and middle of the road where asphalt covering has been washed away by rain. Many of these roadside potholes are the junctions where local access joins with the urban road. Also the drainages have been destroyed by erosion as shown in Figures 7.15 and 7.16.

Figure 7. 15: Damaged Culvert on the Urban Road Connecting Ijoka Communities with the City Centre.

Figure 7. 16: Blocked Drainage Covered with Flood Water.

The potholes are very dangerous and often cause accidents and damages to vehicles. Motor bikes often runs into the potholes at night and during the raining season because the holes are covered with flood water and there is no sign to warn road users of these dangers. The Ijoka communities do not have enough resources to repair the damaged

roads except to report to the Ministry of Works. However, at various times members of Ijoka CBO filled up the potholes with sand but these are often washed into the drains along with refuses during the raining season. The local communities excavate the drains from time to time even though it is the responsibility of Ministry of Works. Ijoka Youth Association is social group for children of residents of Ijoka and they usually join their parents in community manual labour from time to time (see Figure 7.17).

Figure 7. 17: Ijoka Youth Helping to Clear out Blocked Drains.

The construction of local road is the sole responsibility of Akure South Local Government, the study revealed that the construction of new roads and maintenance of existing roads had been difficult in past years due to insufficient funds. Therefore, minor projects like clearing of drains and grading of existing roads are mostly the projects carried out by the local government authority. The problem is further compounded by the frequent change of local government chairmen. Every change in the local government leadership brings about changes in the development priority list and objectives of the new leader. The implication is that residents and CBOs therefore have to devise other means of improving the availability and accessibility of access road in the suburban communities. New homeowner whose plots are located in undeveloped area of the communities are compelled to provide access routes to the front their properties which are mostly surfaced road.

"I constructed the road in front of my house, I had to extend the community road to my plot because there was no way for the delivery trucks to drop construction material. The whole place was a bush and water logged because it is a swampy area […] though expensive, I had to cut down trees, sand fill the road to make passable. But with more people living on my street we are able to share the cost among ourselves because every year we need to sand fill the road again and again and sometimes the landlord association help us […] **(Alaba Resident; RI: 9; 2001)**

Figure 7. 18: Access Road Leading to Residences in Communities.

Figure 7.18 shows extension of some community roads to individual houses. The roads were constructed by residents and although they may be riddled with potholes but they are the only motorable access road to these properties and they require frequent maintenance. The maintenance of these roads are implemented by the community associations and property owners and they have decided on surface grading and construction of drainages instead of asphalt covering because this is capital intensive and not affordable. Road grading projects are repeated every year and sometimes broken into phases depending on fund availability until either the state or local government authority comes to their aid. Surface grading and all road constructions don't usually start until the end of the rainy season (September/October) because Akure is located in the tropical savannah climate which exhibits a well-marked rainy season and a dry season. The rainy season usually start in March and lasts till the end of September while the peak of the dry season is between December and March. Most communities often delay road grading till December when there is no rainfall because in Nigeria the rainy season sometimes extends beyond September.

The study however revealed that all the CBOs' leaders in the selected communities in the case study do not know the actual length of the road graded in their communities or total length of communal road projects. This is not peculiar to private layouts alone, the GRAs are also affected as none of the layouts have updated site plans which shows location of amenities and measurement of roads. They simply find it easier to calculate road projects based on number of streets graded because with every new housing development, homeowners regularly extend the communal access road to their residences. The local community therefore devised the means of keeping record of their activities;

> *"We don't have the technical equipment to measure our road, even if we want to do it manually it is very difficult because everybody keeps adding to the road. We don't really know the true length of each road and in anyway most of the street have names. We therefore count the numbers of street and the grader charge us daily until the whole community streets are all graded. However, because it's an annual project, over the years we sort off estimate new project based on the numbers of days spent on the previous road grading project […]"* ***(Awule GRA Community Leader; CL: 2)***

Figure 7.19 shows the record of number of street graded between 2007 and 2011 and it shows a gradual increase of streets graded annually. 155 community roads were graded and Omoniyi and Obaile have the lowest number of road projects of 15 and 10 respectively. Omoniyi community is a new residential layout and it smallest community in the case study. Obaile GRA on the other hand is the largest housing estate in Akure and the size keeps increasing as more layouts are added to the initial estate. Nonetheless the number of streets graded is the smallest because many of the roads in the housing estate have asphalt covering while private layouts around the estate does not have any asphalt covering. History reveals that Obaile town is as old as Akure city but unfortunately, the town is not well developed. The establishment of the Obaile GRA and the two television stations in Ondo State (NTA) did little to influence the development of the town. Awule community on the other hand recorded the highest road grading projects (51) followed by Abaoyo (42).

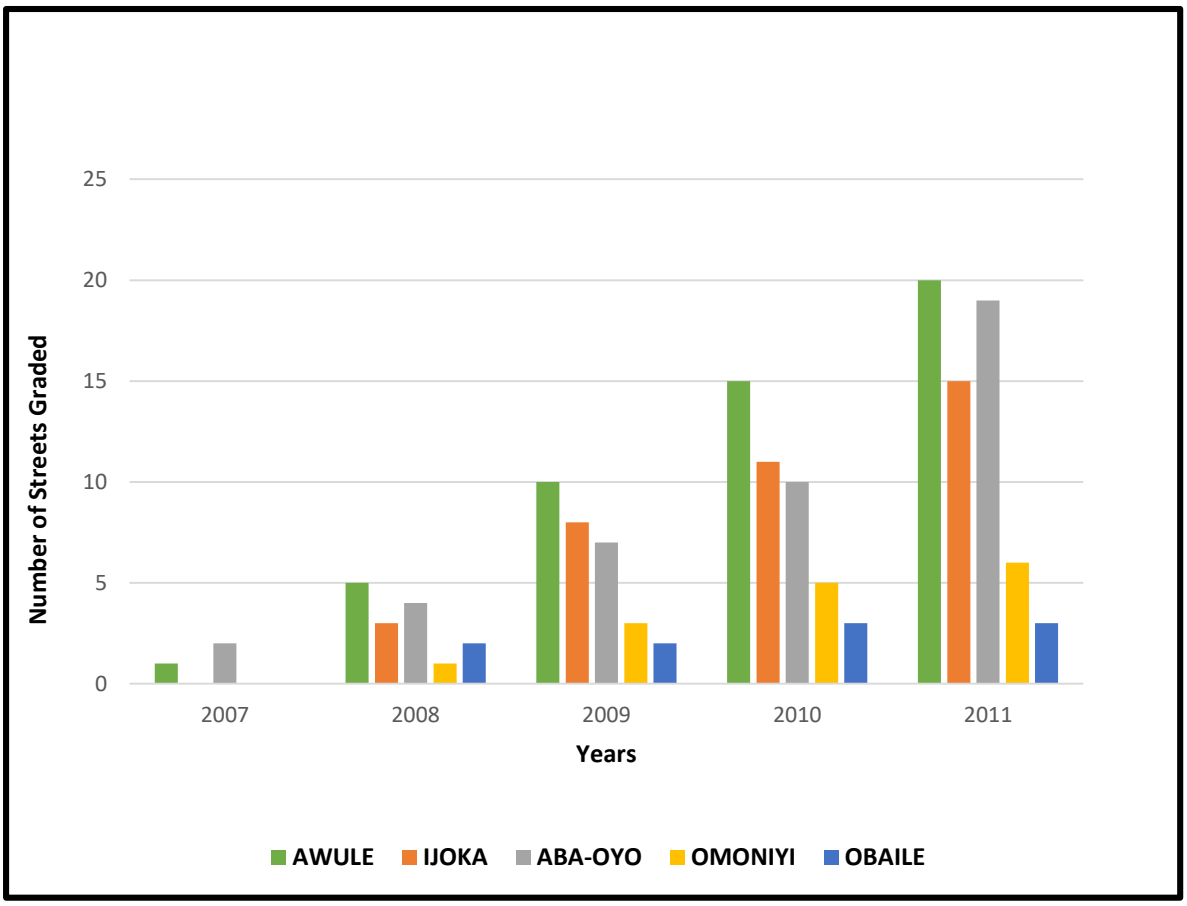

Figure 7. 19: Total Number of Road Projects between 2007 and 2011.
Source: Community Associations Records (2011)

With the aid of Google Earth Pro, I estimated the total length of communal road provided and maintained by the CBOS within each layout in the case study (Table 7.8). 52.85 kilometres roads are graded annually by CBO's for all the communities in the case study. Omoniyi community have the smallest road network (3.73km) because it a new layout and it is a low income residential area therefore most of the roads are constructed by individuals while building their houses. Abaoyo – FUTA community have the utmost total communal road projects of 16.24 kilometre followed by Awule community (14.55). Apatapiti, Alaba layouts and Awule GRA (Zone 4) on the other hand have more access road of 6.97km, 5.49km and 5.44km respectively more than the other layouts in the case study (see Figure 7.20). The length of access road keeps increasing as new homes are developed in each case study as new homeowners often extend the access roads to their residences. Awule and Aba-Oyo communities on the other hand were formerly cocoa farm plantation which over time got developed and changed from rural area to sub-urban area. Until 2000 the community was a cocoa plantation with few farmsteads, student hostels and residential development.

Table 7. 8: Length of Community Road Projects in the Case Study

S/N	Community	Locations/Layouts	Length (Km)	Total
1	Ijoka	Odopo	4.72	12.65
		Ilotin	4.20	
		Abusoro	3.73	
2	Awule	Awule GRA Zone D	5.44	14.55
		Asuwamo	4.75	
		Apatapiti II	4.36	
3	Obaile	Fatuase	3.50	5.68
		Obaile GRA (zone A)	2.18	
4	Aba-Oyo- FUTA Area	Apatapiti	6.97	16.24
		Elekinran	3.78	
		Alaba	5.49	
5	Omoniyi	Omoniyi	3.73	3.73
	Total		52.85	52.85

Source: Google Earth (Accessed on 18.05.2016).

Note: The length of road was generated from Google Earth based on historical imagery for 2011.

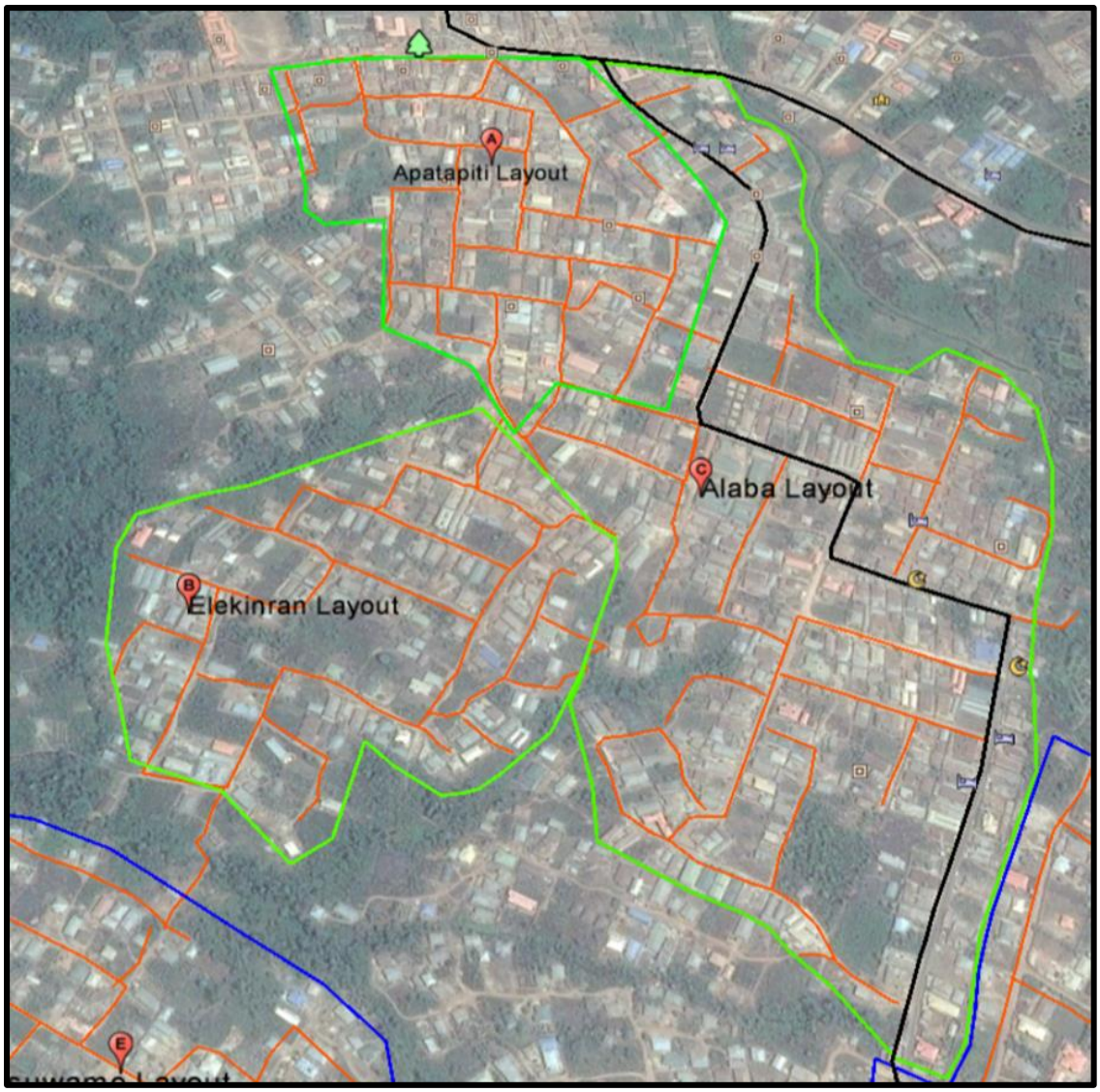

Figure 7. 20: Map of Communal Roads (Trunk C) in Abaoyo-FUTA Community.

Source: Google Earth (Accessed in 17.05.2016).

Figure 7. 21: General Condition of Access Roads in Abaoyo – FUTA Community.

Top: Alaba Layouts;
Middle: Apatapiti layout
Bottom: Elekinran layout

Figure 7.21 shows the poor conditions of existing community roads in Abaoyo –FUTA area despite the high number of road project (16.24km). Most of the road networks in

these two communities are earth surface with no drains or pedestrian walkway. The only road with asphalt covering was the Awule – FUTA road popularly called Stateline (discussed in the previous chapter) (see Figure 7.22). The road was originally a community road connecting the Awule community and Abaoyo-FUTA Area with the university. The road was upgraded to an urban road in 2008 by the state government as an alternative route to the FUTA University in order to reduce vehicular queueing and trip time's dues to constant traffic congestion around the University South Gate. However only the section of Awule Village road with the GRA was repaired.

Figure 7. 22: Awule – FUTA Road Network.

Top Left: Main junction leading to Awule GRA (zone 4)
Top Middle: The point where the newly constructed Awule – FUTA road stopped along Awule Village road (traditional road)
Top Right: Continuation of Awule Village road which also led to Asuwamo layout.
Bottom Left: Alaba layout section of Awule – FUTA road
Bottom Right: Awule GRA section of Awule – FUTA road

The remaining access roads within the Awule community are untarred including the GRA roads which was established as a site and service scheme and government was supposed to provide all the infrastructure while residents were to build their houses. The state government failed in their responsibility, therefore residents had to provide the basic. Likewise, the location of Awule GRA did not influence the provision of infrastructure in the neighbouring layouts. Apatapiti II is just about 0.24km from Awule GRA but the main road connecting the layout with Awule GRA does not have any asphalt covered road all the access roads are earth surface and in poor conditions as shown in Figure 7.23 and Figure 7.24.

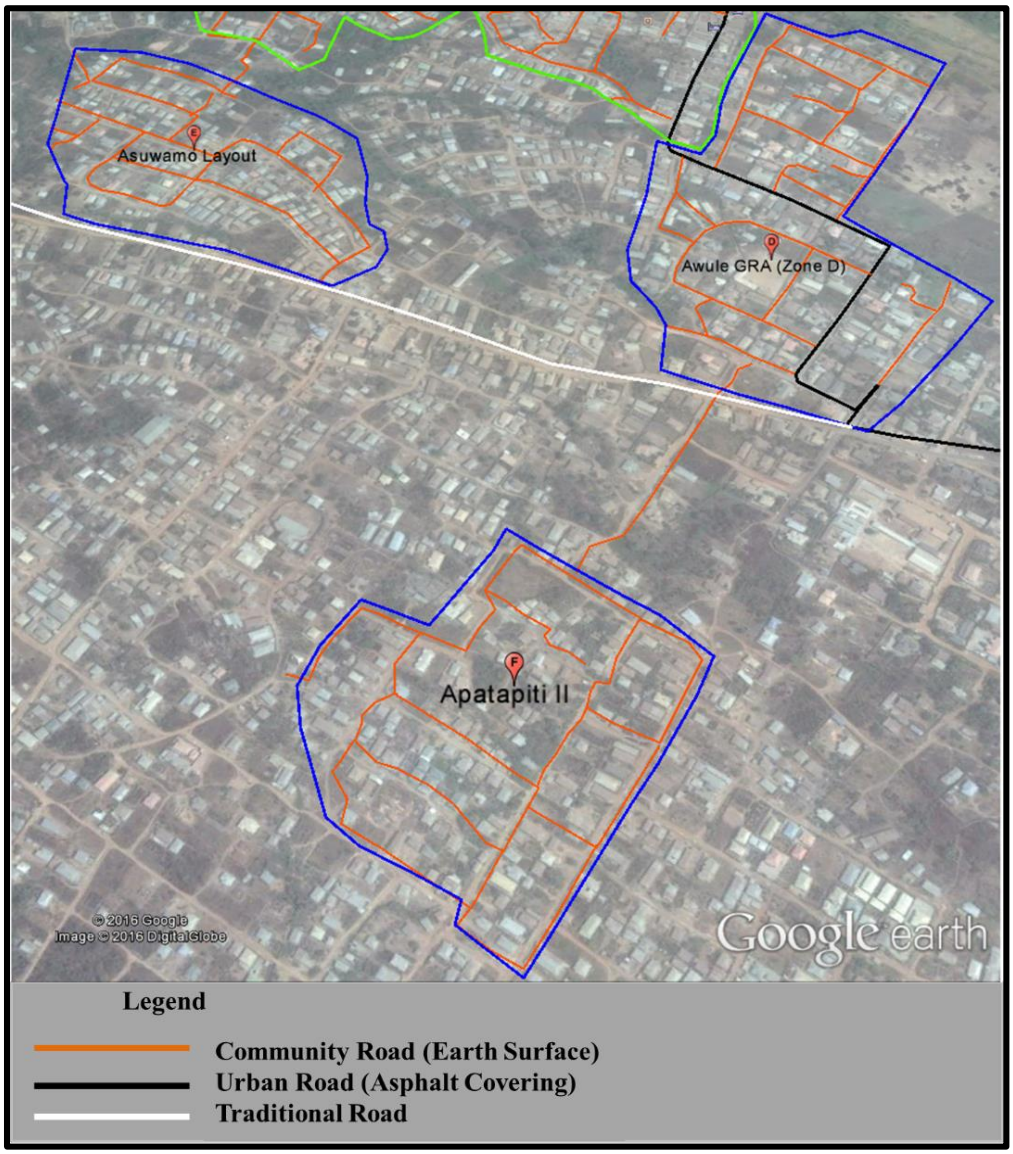

Figure 7. 23: Map of Road Networks within Awule Community.

Figure 7. 24: Access Road within Each Layouts in Awule Community.

Top: Asuwamo Community

Middle: Awule GRA

Bottom: Apatapiti II

Even though Awule GRA (14.55Km) has the second highest number of road projects after Abaoyo – FUTA in the case study, the qualities of the road did not improve as shown in Figure 7.24 however the residents are willing to make continuous financial contribution. Many of the Awule GRA residents are state civil servants and with the increase in minimum wage and a change in the CBO's leadership in 2009, more residents were willing to participate. This also includes new road layouts to new residential properties and maintenance of existing roads as stated by respondent below;

> "……*The provision of road network in the estate has been solely on individual and communal effort! Every year at the end of the raining season we usually hire caterpillars and road graders to clear and grade all our road and the project is expensive. We do appeal for help from Ministry of Works which is never forthcoming! At least if they give us the road grader, we don't mind paying the operators but most times we usually hire from private companies and we are aware that the agency in charge of Obaile often grade their roads for them. Anyway we don't have any choice because the roads are damaging our cars and thanks to increase minimum wage more residents are happy to contribute…"* ***(Community leader, Awule GRA, CL: 2)***

The increase of minimum wage in Nigeria afforded more residents to be financially committed towards CBO's communal project. The Federal Government of Nigeria increased the minimum wage from ₦ 5,500 (£20) to ₦ 18,000 (£65) per month from 1st of January 2011. In Nigeria, minimum wage is not dictated by price fluctuations or inflation, rather it reviewed every 10 years and a new minimum wage was approved in July 2009. Although many states and local governments could not afford the payments of this increment, Ondo State is one of the few that could and this brought about increase in housing construction and subsequent demand for road infrastructure. Nevertheless, it enhanced community's affordability of community self-help projects and resident's financial participation in the case study. The study revealed that there was gradual increase in road grading projects in Ijoka and Omoniyi communities between 2007 and 2011.

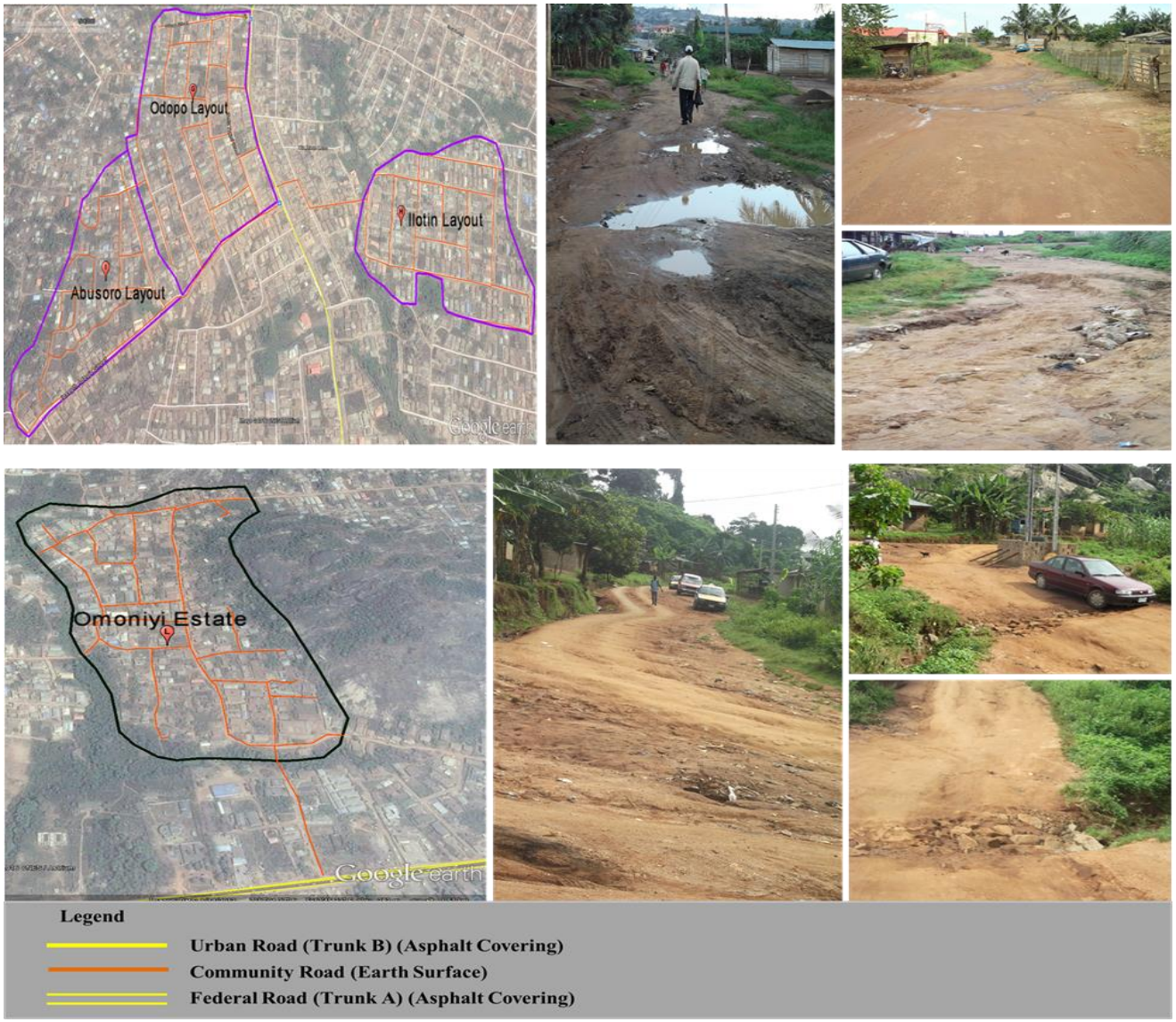

Figure 7. 25: Road Network in Ijoka and Omoniyi Community.

Top: Map and pictures of communal road in Ijoka community showing the only urban road connecting the three neighbourhoods

Bottom: Map and pictures of road network in Omoniyi showing the connection of the road with federal highway

Figure 7.25 revealed that the community roads are riddled with pothole and erosion channels and most of the road have no gutters. Many of the roads are always flooded and slippery any time rains fall which often makes the road impassable for both vehicles and pedestrian. The lack of drainage means rain water are not channelled and often lead to flooding of nearby houses which is a common occurrence at the peak of the raining season in July despite the efforts of the community association to repair the road;

> *"Most times when it rains some of us are scare of leaving our houses because we can be stranded. We always have to wait some hours for the rain water level to reduce before we can pass through the road and if you in a hurry and you don't have a car, you will have to pay an Okada man (bike rider) to take you to your house. Many of the roads are so bad and when they get filled with water, it is difficult to locate the holes in order to avoid falling, as a matter of fact taking a bike ride is equally dangerous as my wife fell down from it last week when she was rushing home from work because a neighbour called her that their house was flooded and she wanted to get home to check that our home was not affected……* ***(Ijoka Resident, Odopo Layout,*** **RI: 32).**

Obaile community recorded the lowest numbers of road projects between 2007 and 2011 (see figure (see Figure 7.19 and Table 7.8). Most of the road projects was executed in Fatuse community which is a developing private residential layout located very close to Obaile GRA. The location of Obaile GRA did not have any influence on the provision of infrastructure development in Fatuase layout which has approximately 43 houses with many more under construction. Fatuase Landlord (homeowners) Association used part of the monthly contributions to grade the roads and construct drainages. However, each landlord is responsible for the construction of both culvert and the block works of the gutter in front of their residence as shown in Figure 7.26.

Figure 7. 26: Map of Obaile Community and Road Networks in Fatuase Layout.

Map showing all the tarred roads in Obaile GRA (zone 4) and all the road construction project showing the gutter and the various makeshift culverts constructed by homeowners (Anticlockwise from the top left)

Obaile GRA on the other hand is an established government residential housing estate where government agency (Ondo State Property Development Corporation) provides provide and maintain all the infrastructures within the estate. Unfortunately, due to bureaucratic process and government slow response to requests some of roads with the Obaile GRA need repairs while there is still about 5.85km kilometre of earth surface roads, however the estate is the only layout with many access roads with asphalt road covering (see figure 7.27). Only two road grading projects (2.18km) were carried out by homeowners within the Obaile GRA (Zone A).

Figure 7. 27: General Condition of Road Infrastructure in Obaile GRA.

- The picture shows the three types of road in Obaile GRA.

1) Gravel road partly resurfaced with asphalt.
2) Recent road graded by a homeowner.
3) Potholes on the Asphalt road
4) Road graded by Homeowner
5) Main road within the housing estate covered with asphalt
6) Covert and open gutter provided by OSPDC
7) Gutter covered with grasses and Public transport (Taxi) plying within the housing

Road grading is an ongoing process in all the communities until the state or local government are able to proffer a lasting solution to the insistent potholes, gullies and erosion. At the end of each rainy season the sand used to fill up potholes would have been washed into the gutters where available exposing the potholes. My field work coincided with the end of rainy season and I was opportune to see the effects of the rain and vehicular movement on the roads graded in Awule GRA. The Awule GRA leaders allocates annual budget of ₦ 150, 000 (£547) for road surface grading and it usually costs the association ₦ 50, 000 (£182) to hire a road grader per day meaning that the community roads were graded within three days. Will this be enough to improve the quality of the roads?

Respondents were asked to assess the quality of roads within their community availability and access to road infrastructure does not guarantee the quality. A number of factors was used in assessing the quality of community roads such as road width; surface conditions; number of lanes and reliability of usage in all seasons. Table 7.9 shows the attributes and the variables used to assess the quality of community roads while table 7.10 shows the assessment index for the surface condition. The quality of road in the study area is similar in all the private layouts while there is vast difference between the public layouts.

Table 7. 9: Assessment of Road Quality.

Variables	Attributes	Communities					Total	Percentages
		Awule	Ijoka	Abaoyo - FUTA	Omoniyi	Obaile		
Road Width	Wide	6	4	5	-	5	20	33.33
	Narrow	9	11	10	5	5	40	66.67
Number of Lane	One	4	7	4	2	3	20	33.33
	Two	11	8	11	3	7	40	66.67
	More than 3	-	-	-	-	-	-	-
Road Surface Finishes	Asphalt	1	1	1	-	4	7	11.67
	Gravel	-	-	1	-	1	2	3.33
	Earth Surface	14	14	13	5	5	51	85.00
Reliability of Usage	Reliable	5	-	1	-	5	11	18.33
	Not Reliable	10	15	14	5	5	49	81.67
Surface Condition	Excellent	-	-	-	-	-	-	-
	Good	-	-	-	-	1	1	1.67
	Fair	3	-	-	-	4	7	11.67
	Poor	12	15	15	5	5	52	86.67

Table 7. 10: Assessment Road Surface Condition

Condition Assessment	Characteristics
Excellent	Free of potholes, peel offs, and cracks.
Good	Very few pot holes and peel offs
Fair	Some potholes and peel-offs that could be refilled to make traffic flow better.
Poor	Potholes and peel offs at almost every kilometre; the shoulder of the road had eroded off. Many potholes with gullies or ditches, broken down bridges, broken road shoulder and depression.

Source: Opawole *et al.* (2013)

66.67% of the respondents adjudge their community roads to be narrow even though they were designed as two lane routes on the layout plan. Some roads have rocks that require blasting which entail technical skill and it is expensive. In order to reduce the cost of construction, the residents and CBO simply created a single lane which makes the road narrow;

> *"We have to pay some men to help blast the big rock with explosive and also break the smaller rocks manually. The manual process is expensive, tedious and time consuming and many of us have to blast rock on our site before we are able to build our houses therefore we can only afford to pay little towards the blasting of rocks on the road. So we tried as much as possible to navigate around obstacles either rock or stream which means we don't have even road, they are narrow and wide at different sections"* ***(Residents, Elekinran*; *RI:5)***

Likewise, most community roads are not properly constructed and are earth surfaces which allows grass to grow on the road thereby taking up large portion of the road (Figure 7.28). Some roads are too narrow for 2 vehicles to pass by each other or to allow road users (pedestrians, bicycle riders) to walk along the road. This usually causes delay during the rush hours especially in the morning when children are going to schools as many motorists are inpatient and not polite enough to give way to the oncoming vehicle or pedestrians manoeuvring along such road. The Asuwamo women focus groups participant pointed out another hazard of narrowed with bushes is that many a times pedestrians have to walk on the grass or move into the bushes to avoid on coming vehicles and if care is not taking they could step on snakes lurking around the bushes which is a common reptile in new development areas;

> *"…. the other day I was walking my children to school and as the children were trying to move aside for oncoming cars there was a green snake lying on the grass. If I was not there that they could have suffer snake bite. We kept on walking on the road in order to avoid the snake because I don't have anything to kill it and moreover we were already running late for school. The motorist kept pressing the horns even when I shouted that there is a snake beside the road anyway we did not move aside until I saw a clear and safe area……* ***(Participant,* FG1:7)**.

Figure 7. 28: Narrow Community Roads with Rocks and Grasses.

There is no provision for kerbs and walk way roads did not have kerbs
Left: Roads with grasses
Middle: Road with boulders and small pebbles broken manually
Right: Resident walking on the road and stopping for cars.

The roads are also prone to erosion and filled with potholes because they are unpaved earth surface. 81.67% of the road surface finishing are earth surface while the 11.67% of asphalt covered road are mostly in Obaile GRA. The over reliance on earth surface is mainly because of lack of resources, equipment and expertise while the best could have been asphalt covering.

> *"We love to have asphalt road, like in the urban areas because it will make live more bearable. We will spend less money on car repairs and even the time used to clean our house. During the dry season if you are walking on some of our road, clothes and feet get dirty because of dust and we are always coughing. The raining season is more manageable only that some motorbike will refuse to go to some areas because of mud and water, you therefore have to trekked the long distance or pay more fare to encourage them to carry you.* ***(Omoniyi Resident, RI: 29)***

The reliability of community roads shows that many of roads in the study area are seasonal in nature. Some of the road are impassable during the rainy season as

81.67% are unreliable and most of the surface conditions are very poor (86.67%). Road users especially pedestrians are often exposed to dust pollution. Dust pollution can cause grave danger to health especially for people with respiratory illness but residents have no other alternative than to bear the dust. Dust kicked up by moving vehicles on the unpaved roads are very high in the dry season but it reduces during the rainy season however the roads are always muddy and pedestrian have to avoid dirty water splashes. This is as a result of poor drainage system and bad surface condition such as potholes, gullies and ditches, major cracks (longitudinal and transverse), depressions, broken down bridges and erosion. Table 7.11 shows the respondents mode of transportation within and out of their neighbourhood

Table 7. 11: Mode of Transportation within the Community.

S/n	Communities	Layouts	Mode of Transportation			
			Cars	Motorcycle	Bicycle	Walk
1	Ijoka	Odopo	1	1	-	3
		Ilotin	2	2	-	1
		Abusoro	2	1	-	2
2	Awule	Awule GRA Zone D	5	-	-	-
		Asuwamo	2	1	-	2
		Apatapiti II	2	1	-	2
3	Obaile	Fatuase	2	1	-	2
		Obaile GRA (zone A)	4	-	-	1
4	Aba-Oyo-FUTA Area	Apatapiti Layout	4	-	-	1
		Elekinran	3	-	-	2
		Alaba	3	-	-	2
5	Omoniyi	Omoniyi	2	1	-	2
	Total		**32**	**8**	**-**	**20**

Table 7.11 show that 53% (32) of respondents are car owners while 33.33% (20) often walk from their residence to the nearest bus stop. Quality of road has great implication on the wellbeing and quality of life of road users. Residents spend much to maintain family cars. Unfortunately, the poor road condition discourages public transports from operating within most of the communities except Obaile GRA which have public buses transporting residents between the estate and the city centre. Many residents have to commute to work in the city centre daily at huge cost. The poor condition is also a major threat to security as thieves often take advantage of the bad roads at night to rob pedestrians of their valuables. Many residents rely on motorbikes for their daily

transportation, while residents have had motorbike accidents due to potholes on the roads.

7.6.2 Communal Water Projects

The provision of water infrastructure within the case study is on individual basis and the reason is that water consumption is subjective and based on individual usage. Ilotin is the only community that is involved in collective water supply. They teamed up with another community to access government funding to procure two solar powered boreholes for their communities. Other communities see provision of individual alternatives source of water cheaper and will rather invest in those project that are capital intensive and indivisible. Most communities also avoid collective water projects because of the difficulty and cost implication of connecting water to every house. Table 7.12 shows the source of domestic water supply in the study.

Table 7. 12: Respondents Major Source of Domestic Water Supply.

Source	**COMMUNTIES**						
	Awule	**Ijoka**	**Abaoyo-FUTA**	**Omoniyi**	**Obaile**	**Total**	**Percentage**
Boreholes	2	1	2	-	3	8	13.33
Spring/stream	-	-	-	-	-	-	-
Rain	-	-	-	-	-	-	-
Hand dug well (electric water pump)	7	5	6	3	4	25	41.67
Hand dug well (hand drawn)	4	7	7	1	2	21	35.00
Water vendor	2	2	-	1	1	6	10.00
River	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Pipe borne	**-**		**-**	**-**	**-**	**-**	**-**
Total	**15**	**15**	**15**	**5**	**10**	**60**	**100**

There are different sources of water for domestic use - cleaning, washing, cooking, bathing etc. Table 7.12 shows that hand dug well is the highest source of domestic water for residents in Akure suburban area. Water from the well could be hand drawn with a bucket and a rope (35%) or pumped with an electric water pump (41.65%) and apart from rain water, stream or river it is the cheapest source of water supply. Rain water is seasonal and not available throughout the year while stream and river waters are not fit for drinking and purification is considered expensive (See Figure 2.29)

Figure 7. 29: Source of Water in Akure.

Top Left: Covered hand dug well where the water is pumped with electric pump.
Bottom Left: unhygienic open well use for car washing and cleaning purpose
Top Middle: Electric water pumped
Bottom Middle: A water tank where rain water is collected in front of a resident's house
Top Right: A resident fetching drinking water from his neighbour's house.
Bottom Right: Drilling of a borehole in front of a resident's house.

Hand dug well is a traditional method of obtaining groundwater in Nigeria and it still the most easily accessible source of water supply in the city. However, it is prone to contamination from sewerage and runoff water if it is not well positioned and deep enough. The wells are dug manually by local well diggers who have the skill and experience to carry out the excavation and it is only suitable to soil types e.g. clay, sand, gravel or mixed soil where only small boulders are encountered which are blasted in order to gain access to the underground water.

The diameter of most hand dug well is 1.5 metres while the volume of the water and the quality depends on the depth of the well which ranges from 5metres to well over 20 metres, any depth beyond 30 metres is considered well purified for any use including drinking as it is said to exploit an aquifer. The well acts as a reservoir for underground water table which meets the water demand of residents and replenishes itself at night or during the period it is not in use. The cost of borehole drilling is

determined by the depth of the borehole while the diameter is 34 inches which includes the borehole casing and access pipes. The average depth of borehole is between 60m to 80m although it is relative to location and the underlying geology until it reaches the aquifer (water bearing rock). The cost of borehole drilling minimum of ₦250, 000 while that of hand dug is ₦40, 000.

The cost of both borehole and hand dug well is determined by the type of material used, the location and soil type. Akure is in a basement area with lots of rocks and sometimes there is need to blast rocks in order to gain access to underground water. Also in the case of hand dug well the use of pre-cast concrete ring also impacts on the total cost of digging although the traditional hand dug well does not require ringing but most modern wells are lined with pre-cast concrete rings. Each ring is one-metre-high and is used to support the side of the excavation and when properly sealed it prevents the contamination of well water by surface running water. The means of abstraction also adds to the total cost of drilling of borehole and digging of well. Borehole water is considered the safest and most constant source of domestic water supply as it can be used for both drinking and domestic use however it very expensive compared with hand dug well. Table 7.13 shows the distance of major source of water to resident houses and the adequacy level.

Table 7. 13: Respondents Major Source of Domestic Water

Adequacy/Service Level	Distance / Collection Time	No of Respondent	Percentage
Optimal access	Water flowing inside the building	13	21.67
Intermediate Access	Water within the yard / less than 5 minutes	17	28.33
	18m - 54m (1-3plots away) / 5mins	10	16.67
Basic Access	72m – 108m (4-6 plots) / 5 to 15 minutes	9	15.00
	Above 108m and 1000m / next street or 15 to 30 minutes	7	11.67
No Access (poor)	More than 1000m/ more than 30 minutes	4	6.66
Total		60	100

21.67% of respondent have access to water within their house which is the optimal access to water supply while 28.33% have water within their compound or yard and 16.67% get their water three houses from their residence. This is intermediate access to water supply which depends on its availability of water in neighbour's houses and willingness to share. The remaining 50% are considered to have basic access or no access because they spend more time sourcing water outside their residents or plot which could be water stand outside a friend, colleague or neighbour's house. Table 7.14 also shows that residents of Akure suburban communities share water with their neighbour. It is socially accepted to request water from neighbours or friends and some resident see sharing of water as part of their social responsibility;

> *"When I constructed my borehole last year, I decided to give water to my neighbour because there is no public water supply in our community. We usually buy sachet water to drink because we were always having typhoid fever because of the impure water we used to drink. I give water every morning and evening at least for one hour depending on electricity. Also my friend that lives far away drive to fetch water in kegs and jerry cans anytime they require……"* ***(Ijoka Resident, R1:1)***

It is common to see a water tap stands outside the compound of houses with boreholes where water is given to other residents at certain time of the day. This study also shows the failure of Nigerian government to make water accessible in each residence which is the acceptable standard of adequacy. None of the communities have pipe borne water network or access to water supply from the public main supply in the study. Even Obaile GRA that initially had pipe water supply has since stopped with many of the pipe damaged, therefore residents rely on alternative source of drinking water supply according to their financial capability. Table 7.14 shows the major source of drinking water while Table 7.15 shows the adequacy of sources of drinking water in the case study.

Table 7. 14: Respondent's Major Source of Drinking Water.

S/N	SOURCE	Frequency	Percentage
1	Borehole	38	63.34
2	Well	8	13.33
3	Water vendor	1	1.67
4	Water in sachet	11	18.33
5	Bottle water	2	3.33
6	Total	60	100

Table 7. 15: Access to Source of Drinking Water in Akure Suburban Area.

Adequacy/Service Level	Distance/Collection Time	Frequency	Percentage
Optimal access	Water flowing inside the building	10	16.67
Intermediate Access	Water within the yard / less than 5 minutes	-	-
	18m - 54m (1-3plots away) / 5mins	4	6.67
Basic Access	72m – 108m (4-6 plots) / 5 to 15 minutes	9	15.0
	Above 108m and 1000m / next street or 15 to 30 minutes	13	21.67
No Access (poor)	More than 1000m/ more than 30 minutes	24	40
Total		60	100

63.34% of respondent get their drinking water from borehole in Akure suburban community, while water sachet and well water account for 18.33% and 13.33% respectively. Access to adequate drinking water for most of the respondent are considered very poor and regarded as inadequate. 40% of the respondents have to trek for 1kilometre to fetch drinking water, this translate that in a year each of the 24 respondents would have spent minimum of 10,950 minutes i.e. 182.5 days of their live looking for good source of drinking water. This is considered by WHO standard as no

access. Only 36.67% have basic access which are takes each respondent between 2 – 30minutes approximately and most of them relies of their neighbours to give for supply of drinking water. Many of the respondent collects the water in kegs and they are kept for several days until the water finishes and then they make the journey to refill the kegs. Keeping water in kegs and basins has been question by several studies and it considered as possible source of infection, all the respondents confirmed they've had typhoid infection several times and many attributed it to the type or source of their drinking water. When some of the respondents was asked if they have any concern regarding the quality of the water majority respondent yes and that that is why they will rather go to any length or distance to get good water;

> "*Where I live is very far from FUTA where I work, I usually go with two taxis to and fro work. I prefer to fetch my water from the borehole on campus because I think I trust the source better than buying pure water. Any day we need to refill our kegs I have to wait for my husband to pick me from work because we normally fill up to six kegs which usually last for a week during term time and just 3 days during holiday, it is not convenient but I am sure my children and I will not get typhoid from drinking the water" (**Abusoro Resident; Ijoka Community; RI: 21**).*

Some of the respondents preferred fetching water from FUTA because of proximity to work, they are mostly residents of Abaoyo-FUTA and Awule communities. They like the respondent above, trust the source of the water FUTA borehole. Most of the public boreholes are solar powered borehole and availability of water depends on the sunshine, therefore water supply is more regular during the dry season compared with rainy seasons;

> *"There are times we have to lock the government boreholes during the raining season because of there is no enough stored power to pump water. We usually restrict access to borehole to once a day mostly in the evening to allow the water to pump during the day and we also limit amount each person can get to just a keg/25litres to allow many people to have water. But during the dry season we usually leave the tap open throughout the day…." **(Alaba Layout Community Leader, CL: 1)***

The boreholes in the private layouts are functioning and well maintained by the local communities and every faults/damages are reported to appropriate government agencies in charge of management. It is a different case in the government residential areas (GRA), the Awule GRA community leaders are proactive and they make sure

that the borehole is well kept and the damaged overhead tanks and solar panel were promptly reported and repaired by the water corporation. This is in contrast to attitude of residents in Obaile GRA, where their borehole is neglected and abandoned by the residents. The borehole is covered with climbing weeds and right beside the abandoned borehole is a house where borehole water is being sold to the members of the community. Some residents living close to the abandoned borehole were questioned and their response was that they have water supply in their houses and that the borehole had never worked from the inception and it was only constructed by government for political purpose. The borehole was not properly constructed; the overhead tank was only filled with water by a tanker so that water can flow from the tap when the state governor commissioned it.

Water sachet is the second major source of drinking water, and it is popularly called "pure water" (Figure 7.32). There are different brands marketed in Nigeria which are readily available and the price is affordable at ₦10.00 per sachet or at a discount of ₦120.00 for a bag containing 20 sachets. Each sachet is 500g, it is readily available in bags and also hawked by vendors making it an accessible and affordable source of clean water (see Figure 7.30). Nigerian Food, Drugs Administration and Control (NAFDAC) regulates sachet water production in order to improve it as a good source of drinking water however the quality of sachet water being sold cannot be guaranteed because of contamination. There are varieties of sachet water producers in Nigeria and many of the sources of water used for production cannot be deemed pure (Ajayi *et al.*, 2008; Dada, 2009b; Dada, 2009a). The reliability of the hygienic environment and quality of water packaged has also been questioned as it has been linked to past outbreaks of water-borne illnesses due to consumption of polluted water in sachets (Ajayi *et al.*, 2008; Dada, 2009b). Nevertheless, most consumers do try to buy from reliable companies selling packaged water and many of these companies also produces bottled water alternative;

> *"I usually try to buy my sachet water from just two sources but I preferred the one made by the University because I am sure of the condition of production. We know that there are so many adulterated water sachet, with rain and well water and it is difficult to detect the good ones. We will usually look for the NAFDAC number, then we use the taste and odour to determine the good ones…. **(Resident of Asuwamo, R1:15)***

Figure 7. 30: Sachet Water in Nigeria.
Source: Express (2014); (Naa, 2016)

Top Left: A street hawker selling sachet water in a bowl
Top Right: Bags of sachet water kept in a retailer store while some are being prepared in bowls for street hawking.
Bottom Left: Sachet water processing plants with bags on sachet water place on the floor
Bottom Right: Truck transporting sachet water from factory to retailer.

7.7 Factors Influencing Community Participation

This section examines factors that influence involvement in community participation. Culture has been identified and discussed in section 8.2 as major for influencing the adoption of community participation as a strategy for infrastructure provision. Other factors include deprivation, motivation, socioeconomic status, growth pattern and lack of master plan.

7.7.1 Lack of Adequate Infrastructures

Lack of adequate infrastructures is a major reason most suburban residents are involved in community self-help project having realised that it is better and cheaper to collectively provide the much needed infrastructure. Almost all the suburban communities are new private residential developments with little provision from the state or local government authorities. Most private layout owners just subdivide and sell land plots to private individuals without making any provision for infrastructure development. Likewise, many failed attempt to get the government agencies to provide basic amenities coupled with problem of bureaucratic process led to the adoption of community participation as a solution to inadequate provision.

> *"It is government responsibility to provide all infrastructure but unfortunately they have failed in their duty. I was the third settler in my community and when I moved in there was no infrastructure at all, I had to hire a grader to open up the foot paths so that trucks could deliver building material and for me to drive to my house. Even though my community is so close to the only university in Akure with lots of student hostel all our attempt to get any help from the state or local government was unproductive. We thought having a democratic government will be better but it is even worse than the military era, we've written so many times hoping that one day we will get their help but if you are not a politician you don't get anything in Nigeria! We contributed to blast all the rock on the road…"* ***(Resident, Elekinran community, RI: 6***)

Resident have had to protest severally in public places just to get the attention of government agencies to their plight. The residents of Awule community had a demonstration to show their grievances with the slow progress of the road construction work in the community. They blocked the community road from 6:00am to 9:00am on a Monday morning preventing residents from going to work as shown in Figures 7.31, 7.32 and 7.33. The purpose was to get the attention of the media, the politicians and government agency responsible for the project.

Most of the demonstrators at the rally are landlords and household heads who are high ranked government workers and will rather be at their place of work instead of a protest rally. However out of desperation they considered the rally as the last resort to get the attention of the state government and to show their grievances;

> *"We are tired of the road project that has been dragging on for the past 3 years and many of us have had accidents on the road. 2 months ago my bag was*

stolen from me as my motorbike was trying to avoid a deep pothole on the road. The road was very slippery because of rain. Somebody ran out from a nearby bush and snatched my handbag with force so much that both the bike man and I fell into a ditch and I broke my arm. If government will not help us at least the whole nation will hear about our plight …. ***(Resident, Awule Community: RI)***

Figure 7. 31: Residents of Awule Community Holding a Demonstration.

Figure 7. 32: Residents Cars Blocking Awule Road.

- Residents Cars parked to block the main road leading into the Awule community in order to restrict movement so as to stop workers from going to Work.

Figure 7. 33: A Demonstrator Holding a Placard with the Community's Demand.

Awule community resident adopted a radical and transformative approach which according to Fraser (2005) is not always popular because of the stigma to attach it. Many participants are reluctant about this approach because they prefer their privacy and the fact that it could turn violent if not well planned and managed. However out of desperation many residents came out very early on Monday morning to shows their commitment to the collective goals of improving the quality of their road.

7.7.2 Motivation to Participate

Motivation could be based on a number of factors such as political, religious or ideological. Some resident's participation is due to personal ideology and community comradeship without necessary seeking gain or compensation. Such participants will go to any length to foster community participation and will use personal resources such as money, material and manpower to execute community project without demanding any reimbursement. Their actions also encourage other community members to participate:

> *"I always want to contribute to the development of my community because I believe that I live it is good to let the people around you feel your impact. You don't have to wait till you become a rich man before you use your position and resources whatever you can help others. I have paid for the grading of the community road severally and also made a stand tap at the front of the house for other residents to get water. In fact, I fixed some of the street lights on my street and connected them to my generator. I derive joy when I help other members in my community and I am not expecting any body to thank me or repay me. I am just doing what I was taught by father to imbibe the habit of helping others…."* ***(Ijoka Resident, RI: 1).***

The respondent above believes that it is part of his moral obligation to participate and contribute to the development of his community in any capacity he could and likewise encourages their friends, families and neighbour to do likewise. Political interest is another motivation for some residents to join their local CBOs. Some Politian's contribution is merely for personal gains and to boost their political ambition. They participate in order to attain prestige and status within their society so as to influence the electorate as explained by a resident:

> "M*y neighbour suddenly became active in the community and also encouraged his friends to participate and started attend community meetings regularly. He used to be one of the defaulters and will never pay his monthly contribution or*

*levy and if he was forced to make any payment then he will continue to moan and complain about the payment for days. But two years ago his attitude changed. We later learnt that he was contesting for a councillorship in the local government election, well we voted for him anyway because he is a member of the community and also my friend. But we just hope he will continue to be an active member although I will not be surprise if otherwise (laughed) lets wait and see……. **(Odopo Resident, Ijoka, RI: 32,)**.*

This cannot be regarded as true participation because it involves manipulation and does not exactly promote empowerment. It is the bottom rung of the participation ladder. This type of participation is considered to be nominal by White (1996) because the personalities of some residents determines their level of participation. Some community members are passive or non-participant until they found themselves in certain prominent position in the society such as religious or political position. However, many of the government sponsored infrastructures development in the communities are influenced by a community member who has political affluence and connection with the government administration.

7.7.3 Socio-Economic Status

All the private layouts in the sub urban areas are zoned as low and medium income while the government residential areas are classified as the medium and high income zone. The zoning is supposed to guide the development and provision of infrastructure facilities however except for Obaile GRA, they all lack good infrastructure compared with other private layout. The leaders of these communities are accountable as they always give monthly financial report and this encourages resident participation;

*"…. I am professor and most of the time I am not able to attend the community meeting because I am very busy, but I love to participate as the current executive always give us the financial report every month. Whenever I am not around, my son represents me so I always get the minutes of the meetings. I try to show good examples to my children and even my students living in the community. I always make sure that I contribute my monthly dues and often make voluntary contribution because I am not always available to take part in the manual labour but whenever I am around I make sure I do and I always enjoy the exercise. Also how much is the money compared with what I earn? The amount is small and I can afford it……." **(Apatapiti Resident, RI: 8).***

7.7.4 Change in Growth Pattern and Lack of Master Plan

Akure growth pattern has changed considerably over the years leading to changes in the land use pattern. As the city expands, residential land use areas are pushed to the periphery of the city which are the sub-urban areas in Akure. The development of the suburban communities is rather spontaneous and coincidental most of them were subordinate agricultural rural lands and villages surrounding Akure city which gradually merged with the city. The new growth patterns do not reflect on the city master plan as it has not been updated since it was designed in 1980. The master plan expired in 2000 and did not capture all the new suburban areas even though majority of government residential area are located in these sub-urban areas. However, government is aware of the changes taking place as stated by the Director of Development and Planning

> *"Most of the ministry's worker and officials including myself live in the suburban areas and we know that the city has expanded tremendously. We are aware of the antecedents to poor infrastructure, I am an urban planner wearing two caps. I am a director in planning ministry and at the same time the state chairman of Nigerian Institute of Town Planners Association. We have made several attempts to update the expired master plan but to no avail due to bureaucratic process, we have been waiting for executive approval of the draft plan for the past 2 years. Until we receive the approval we cannot employ a consulting firm for the review therefore we have to rely on the old master plan and layout plans for physical planning and the development of the city".* **(OSMPPUP, GA: 10)**

The use of the expired master plan means that certain areas of the city will be excluded from physical development and will also hinder the effective monitoring. The use of layout plans requires monitoring. There are more registered private residential layouts (1050) owned by individuals, Families, companies and communities than government residential layouts (12) owned by federal, state and local government. Layouts are designs of parcel of lands that are subdivided into plots of various sizes, they are often approved by the Ministry of Urban Development and Physical Planning without any provision of basic infrastructure. Consequently, the expired master plan and poor layout designs account for ineffective planning, management and inadequate infrastructure developments in Akure. Buyers of plots from the private layouts are aware from inception that they will have to provide basic infrastructure pending government provision and they are informed of compulsory development levy right

from the point of purchasing their plots. They have accepted community participation as the only alternative to government provision.

7.7.5 Sense of Community and Place Attachment

Manzo and Perkins (2006) considered sense of community and place attachment are important to the community participation due to the sharing of a common neighbourhood by various group which helps to foster collective actions. Although it is not in all cases that living within a neighbourhood will influence resident's participation but in the case of Akure suburban area, participants of Academic and Awule Women Association Focus Group Discussions considered sense of belonging and place attachment to homeownership;

> *"Nowadays when we manage to build a house, so much importance is attached to the location and neighbourhood. Much attachment used to be place on building a home in your state of origin or village but now majority of us simply build our houses close to our place of work particularly if you in civil service and your job does not require frequent change of location […] the Nigerian economy is not good at all and we can only afford to build just one house….* ***(Asuwamo Women Association, FG1: 4).***

> *"We are always happy to be of help to each other. We help with child care and school run and we realised that it is cheaper* and *safer especially these days that house-helps kidnap children. We used live in a rented apartment in a GRA but our neighbours were not friendly, in fact we hardly even see each other but since me move into our house, so many of our neighbours have been around to greet us. Some even brought gifts like vegetable from their gardens and they also assisted and accompanied us for my mother's burial even though it was not up to 3 months that we joined the 'Landlord Association'….* ***(Asuwamo Women Association, FG1: 7).***

It is crucial to understand the diverse meanings that a neighbourhood holds for its residents in order to understand the reason they are involved in community participation. This is critical because neighbourhoods are sometime formed by relationships and different cultures of residents most especially if they are living in a neighbourhood where they can form new friendships and relationships.

Living in a new residential layout can be very lonely initially but the Landlord Association is helping many of the residents to relate with other residents because […] many of us are living in these communities and we have come to see our neighbourhood as home. We used to refer to our place of origin or where we grew up as home but nowadays we spend most of our lives in the house we built even after retirement, in fact, those of us working at FUTA have to spend at least 20- 30 years working in the university. Our children have only the memories of our present residence as home, my daughter was only 5 years old when I completed the house we are living in, she went to FUTA primary, secondary and university. The only place she and her brother know as home is where I live now. Gradually we've developed an attachment for the place […] ***(Participants, FG2:6)***

Likewise, their attachment to their community is what influences many of the residents to be financially committed.

7.8 Chapter Summary

In this chapter, community involvement in infrastructure provision was examined. It became clear that lack of adequate infrastructure is promoting community participation. In the past, Nigerian government took pride in being the sole provider of public infrastructure, however this is gradually changing in the light of dwindling resources and increasing urbanisation, cutting down of overhead cost and budget due to increasing inflation. The changes in government philosophy towards infrastructure provision forced the local community than to encourage community participation and increase the engagement in collective efforts towards meeting their infrastructure needs. Deprivation, attitude of government officials, bureaucratic process and slow response to requests etc. are the reasons many residents chose self-help projects as solution to their infrastructure inadequacies. The study shows that there is active participation in most of the selected communities and CBOs rely on monthly contributions and compulsory development levies to finance infrastructure projects. Participants include both homeowners and tenants including women and there is no restriction on membership. Decision process is by consensus and voting and mostly bottom-up except in the case of emergency where CBO leaders have to take unilateral decision.

68.3% of respondent are actively involved in community self-help project while 20% are hardly involved and therefore are passive participants. Education status only

affects participation of some members in the low income community like Ijoka communities while it increases participation in Abaoyo – FUTA and Awule communities. A significant finding is the major source of finance for community self-help projects which is monthly contributions and compulsory development levy. However most of the communities does not give detail financial account as they do not have up to date record keeping of their finances or activities. Evident in the research is that there are more community road projects than government projects in Akure suburban areas, but local communities lack the financial capability, technical expertise and equipment to execute quality road projects.

Furthermore, the collective efforts in meeting road infrastructure needs are limited to opening up of new roads and grading of existing unpaved road while the quality of the roads are poor, unreliable with no road surface finishing. The study also showed that water provision is on individual basis and the highest source of domestic water is hand-dug well while drinking water is mostly from boreholes. There is only intermediate access to domestic water supply while there is no access to drinking water as many of the respondent have to trek more than 1km or more (over 30 minutes) to the source of water. Having presented the findings on community contribution to infrastructure development in the Akure suburban areas, what is the impact of community involvement on the adequacy of infrastructure provision in the study area? This will be discussed in the next chapter.

Chapter 8. Discussion of Findings

8.1 Introduction

This chapter is the discussion of major findings from the analysis chapters, 5, 6 and 7. The study set out to assess the impact of community participation on infrastructure development in Akure suburban area. In Chapters 5 and 6, the institutional framework and government provision of road and water in the study area were examined while chapter 7 examined the involvement of the local communities in infrastructure projects.

8.2 Summary of major findings

The study showed that the local-based agency (Akure South Local Government) is responsible for the provision of local (Trunk C) roads within the case study and are also involved with water provision. However, the agency is unable to provide quality roads due to inadequate fund as evident in all the community roads that are unpaved, riddled with potholes and with no drainages. The few urban roads with asphalt covering are not better off. Another finding is that the regulatory agencies in charge of road (Ministry of Works) and water (Water Corporation) provision only focused on infrastructure provision rather than regulating activities of other agencies. There is lack of collaboration among the key government agencies and the CDD agencies, they all take directives directly from the state governor while the CDD agencies interactions with Akure South Local Government is limited. The study revealed that borehole is the main source of public potable water supply in the study area and it is neither widely available nor is it connected to any residence. Residents' trekked long distances to fetch the water which limits accessibility and necessitates the reliance on alternative means of water supply. Also government CDD programmes were simply focused towards improvement of infrastructure provision in urban and rural communities while neglecting provision in the suburban communities because of poor classification. Unfortunately, suburban area is not considered an integral part of the urban area therefore these parts of Akure city are not properly planned and no provision was made for the supply and improvement of infrastructure development. Residents therefore resorted to collective efforts as a means to meeting their needs through community self-help projects.

On the other hand, chapter eight examined communities' involvement in infrastructure provision and it demonstrated that community participation is a tradition long in existence within the study area which made it an easy alternative used by CBO's as a means to improve infrastructure provision through collective action. All the communities are engaged in self-help projects which are financed with monthly contributions and levies paid by residents. The study further revealed that road projects are constructed through collective effort but communities could only engage in road grading due to lack of fund while water projects on the other hand is mostly on individual basis. Respondents' main source of water for domestic use in the study area is hand-dug well while residents rely on private boreholes and sachet water for drinking water.

Having presented the findings on institutional framework, government provision and contribution of community self-help projects to infrastructure development in the study area, this chapter also considers the discussion on the challenges and the way forward. The chapter provides a link between infrastructure development and community participation based on the findings in the previous chapter. It particularly addresses the reality of community participation and its influence on infrastructure provisions; what determines stakeholders' choices and key obstacles to community participation.

8.3 Theorising Community Participation: What is the reality?

The review of literature in chapter three shows the need to clearly define community participation in the field of infrastructure development. This section examines the need to adopt participatory approach as a strategy for infrastructure development and in the assessment of the reality faced by local people involved in community self-help projects. Community participation is the active involvement of local residents in the formulation and implementation of projects and programmes that affect them which in this case is infrastructure provision. The research shows that community participation involves extensive commitment from local residents irrespective of who benefits or not. Residents are left with no choice other than to engage in self-help provision either as individuals or collectively as it is the easiest and fastest means of providing basic amenities. Furthermore, residents' commitment starts with their willingness to attend monthly meetings to discuss the needs of their community; payments of levies and

contributions allocated to every member. They are also involved in collective manual labour and protest rally but can this be classified as ‘true participation’?

White and Taket (1997) and Barnes *et al.* (2007) suggested that the main objective of a resident participation should not be limited to improvements of their community alone but should include right to power, most especially in the political arena. In other words, true participation should lead to the improvement of infrastructure developments through mutual-help and the empowerment of community members including influencing decisions making process. Choguill (1996a) identified finance, technical expertise, institutional arrangements and political influence as major constraints to community involvement in infrastructural development. These constraints are central to the success of the community self-help programmes even though there is decentralisation of decision-making process. This thesis found that there is need for massive improvement of the quality of self-help infrastructure provided by the CBOs as evident from the research. All the roads projects provided by CBOs are riddled with potholes and none have asphalt covering and they are all in poor condition which reveals that provision of adequate infrastructure transcends the grips of local communities which therefore requires assistance from the government and international communities.

Access to adequate infrastructure is important for the improvement of quality of life and economic growth, in fact, many economic activities thrive only where infrastructure is in constant supply. However, due to bureaucracy process involved in procuring of government provision and abject needs, many people can no longer rely on the state provision for adequate infrastructure. In Nigeria, residents procure lands for housing development from both formal and informal sector. However, most development land are sold without any provision of infrastructure. Therefore, residents are forced to seek an alternative means of providing their basic infrastructural needs through community participation, which has various benefits. Paul (1987) considered capacity building, empowerment, sharing of projects cost, increasing project effectiveness and improving project efficiency as benefits of community participation. Notwithstanding, how good the benefits of community participation might seem it is not a costless process as it takes money, time and skills to organize and sustain participation. The short term opportunity costs of active participation could be quite high and relatively expensive for the local community as the cost is taken out of their personal resources which some

residents cannot afford but with government intervention and assistance, the cost could be minimized.

Community participation also ensure the understanding of beneficiary customs and tradition; skills and motivation; and ensure the provision of appropriate projects and services that meets the needs of the beneficiary. Long *et al.* (1973) and Midgley *et al.* (1986) noted the difficulty of identifying the needs of local community as a major hindrance to designing effective policies and a major problem of public provision The study revealed that local communities were able to identify their needs and requirement, but are usually not consulted when government is making plans and policies and therefore there is no way to project their opinions and needs except through the CDD agencies. CDD agencies operates as intermediaries between the community and government but unfortunately there is no CDD agencies operating in the suburban areas of Akure city, therefore policy makers do not have access to data to make rational decisions and to formulate appropriate and effective policies. They are also willing to implement projects plans although most of the information and records of CBOs activities such as financial income and expenditures or projects executed are not well documented or readily available. This could be due to the spontaneous nature of some local participation whereby local communities are involved in collective efforts just to meet a specific need and the participation ends once the need is met.

Choguill (1996a) considered the information about the needs and requirements of these communities as unpublished and they are important to enhance the understanding and application of community participation to infrastructure development. This information is regarded as important knowledge which are useful for policy decisions, planning, maintenance and the development of future projects. (Mitlin and Thompson, 1995b; Imperato and Ruster, 1999) . They are germane to the assessment of success and failures of community participation and replication. Sadly, most records of local participation programmes are not documented. This failure is not due to education status of participants as findings from the case study shows that even communities regarded as ‘academic communities’ failed to keep adequate record. Lack of adequate information is one of the causes of ineffectiveness of institutional framework due to lack of integration of local objective and information into broad

decision-making (Wolff, 2001). Incorporation of local communities into the decision-making and development process will not only enhance their empowerment but will equally increase their level of awareness and importance of good record keeping. Planning for adequate infrastructure can only be attained through access to current data and information from local organisations.

Community participation as a strategy also allows local communities to share the responsibility for the improvement of infrastructure provision rather than depending solely on the public agencies. The importance of this strategy is that community participation begins and ends with people; it reduces the overhead cost and maintenance of projects and also reduces project abandonment or underutilization. It is important that participation of local community members need to be organised and as such participants must be willing to propose, implement and manage projects. The study further revealed that residents' participating in the development of their communities do not necessarily need to possess the expertise for undertaking such projects. However, due to the homogeneous nature of most communities there will usually be a member of the community who has prior knowledge and expertise but it all depends on their willingness to participate and choices of residents.

8.3.1 What determines stakeholders' participation?

The study identified factors that influences community participation in the case study in section 7.6, which include deprivation, motivation, socio-economic status, changes in growth pattern and lack of master plan. These factors have both negative and positive influence on residents' choice of participation and are the reasons local communities in the case study adopted community participation as a means of meeting their immediate needs. It is important to assess what informs stakeholders' willingness to cooperate as it influences their level of participation. Choice is the possibility of deciding between different options and can be affected by ethics, norms and culture. Ethics involves logical reflection and analysis of decisions, it enables participants to behave or take decisions in some ways different from others, while norm is acceptable or expected standard. Weng and Peng (2014) considered both ethics and norms as subsume in culture. Culture is about values, beliefs and behaviours, it distinguishes one group from another. House et.al (2001:494) provided a more extensive definition of culture as *"shared motives, values, beliefs, identities, and interpretations or*

meanings of significant events that result from common experiences of members of collectives and are transmitted across age generations". Hofstede (1991, p. 5) referred to culture as *"the collective programming of the mind which distinguishes the members of one group or category of people from another"* His study shows that there are five dimensions of culture and it is adapted for the study.

Table 8. 1: Cultural Dimension to Residents' Choices.

Dimension	**Choices**
Power-distance	This is more relative to the politicians and elite control and hijacking participation process and willingness of residents/participants to give suggestions and accept inequality of power/control.
Collectivism/ individualism;	How participants allow their personal goals, interest and needs to influence their choices as against the collective goals of group, community or organization.
Uncertainty/avoidance;	This determine choices that may affect established ways of lives, processes, known systems and whether participants are comfortable with it or not.
Time perspective	Choices are made relative whether projects are long term (future/prolonged) which require perseverance or short term project (emergency) and quick result. This also promote choice of attachment or disassociation.
Gender roles and expectation	Most society and community have separate rules for men and women which affects choices and possibly level of participation. It also affects inclination and interest of different individuals or groups.

Source: Adapted and Modified from Hofstede (1991 p. 5)

Hofstede's (1991) opinion brings to clarity the reasons why many government officials are unwilling to incorporate and implement participatory development. It is because of uncertainty about the approach which leads to avoidance as much as possible. Most of the government officials of key agencies in charge of road and water provision in Akure are not trained in the use of participatory development approach as they have been used to a certain way of operating and discharging their duties. This explains why officials of Ministry of Community Development and Cooperative were unwilling to totally relinquish total control of decisions to the local community. Most of the officials were transferred from other mainstream agencies involved in the use of top-down

approach when the CDD agencies were newly created. The top-down approach is a well-tested and long established approach formally adopted by majority of government agencies in Nigeria right from the central to local government authorities.

On the other hand, collectivism and individualism; and time perspective are the factors that determines residents' and CBOs choices. Residents' choice to participate start from their willingness to become members of 'Landlord Association' which is the main community based organisation. Every individual or residents is permitted to join the association and its activities; as long as they are household heads whether homeowners or tenants. 71.67% of CBO members interviewed are landlord while 28.33% are tenants. Joining the association is free but not without obligations and attempts are made to involve members in participatory development such as including most members of the associations in the decisions process and implementation. However, investigation revealed that it is difficult to represent all the interest of the members of the associations, but it is very easy for residents' choices to be subsumed or supressed even where there are voices of dissents. This kind of participation is considered shallow by Cornwall (2008) who is of the opinion that the general assumption regarding community participation is that everybody is always willing to participate is a wrong principle.

People have choices and will always look for ways to assert their personal interests. However, the personal interest of most CBO leaders in the case study were often subsumed to collective interest and may remain so until the end of their tenure. The study revealed that many of the past CBO leaders' level of participation reduces at the completion of their tenure, especially voluntary contributions. The study shows that in all the communities located in private layouts, most residents have no choice than to embrace collectivism regarding road infrastructure because of the nature of the road projects which requires huge financial investments as there is no alternative provision or individual ownership. Therefore, Akure suburban residents are willing to pay monthly contributions and compulsory levies towards road projects. With regards to water infrastructure all the resident' embraces individualism as provision is determined by individual level of income. However, it promotes individual ownership of alternative source of supply which can be provided at various costs, depending on financial ability.

Lastly, time perspective influences resident choices to associate (sense of community and community attachment). The longer a resident resides within a community, the more likelihood they will make choices to participate as more ties are made with other members. A community is regarded as a place of abode and institution where social ties and friendships are formed and where people have no social ties, attachment or sense of belonging they may choose self-exclusion. It is important to note that non-participation does not necessarily mean unwillingness to participate as articulated by many proponent of community participation. Rather such individual may simply be busy and occupied at the time participation is taking place. In the case of the Obaile GRA, many of the residents chose not to participate because of lack of time even though on Arnstein's (1969) ladder of community participation, it is a level of non-participation. But the reality is that many of the residents work outside Akure city and therefore will rather spend every little time they have judiciously than attending community meetings which may not be high on their priority list.

Others may simply be unable to participate as a result of childcare, sickness or bereavement. In the other communities some residents also chose not to participate due to lack of self-confidence in the CBO leadership while some were equally excluded because they belong to the vulnerable groups and have no one to champion their cause. These are the disabled, aged, children, women, and sick etc. who by virtue of their circumstances maybe unable to participate. However, just like Cornwall (2008) proposed, this study further revealed that participation fatigue and dissatisfaction are major causes of non-participation and self-exclusion in the study area. This is as a result of the unending demand and toils placed on residents as participation is time consuming and financially demanding while the problem and needs seem insurmountable.

8.4 Impacts of Community Participation on Infrastructure Provision.

This section examines the influence of community participation on infrastructure project and participants. Four factors-availability, accessibility, affordability and quality were highlighted in chapter 2 to assess the adequacy of infrastructure provision in the case study based on the finding of contributions of community driven development programmes in chapter 6 and community contribution in chapter 7.

8.4.1 Impacts of Community Participation on Projects: How Adequate is Adequate?

Community participation is often considered as a good thing because it leads to better infrastructure, better maintained community assets, and a more informed participants (Cleaver, 2001) Community participation in *the* study area began as a result of meeting pressing needs and therefore a means to an end. The desired outcomes were to make infrastructure available and accessible. The study revealed that community involvement did improve the availability, accessibility and affordability of road and water infrastructure in Akure suburban communities. Although, it did not improve the quality of infrastructure due to financial constraints, it complements government provision. Road surface conditions remained poor (88.33%); not reliable (81.67%); narrowed (70%) while road surface finishes with bare earth surface (81.67%). There are only few with asphalt covering (16.67%) which is considered as the optimum quality of road. This shows that if local communities can articulate their needs and if given financial assistance, they can improve on the quality of community self-help projects.

Chapter 6 established that local-based agency is responsible for construction and maintenance of all community roads (Trunk C) except for the few designated urban roads. This means that the local government is responsible for both suburban and rural areas while the Ministry of Works is only responsible for urban roads (Trunk B). In Akure city there are 1,526 registered private residential layouts with 719 located in the suburban area, 269 in urban and 538 in rural areas. The implication is that the local government is responsible for more than 1257 which is more than the Ministry of Works coverage. No wonder the local government is struggling to meet their responsibility and are unable to provide quality roads. Majority of respondents' houses are located in the private residential layout with their plots of land purchased from free speculative market. There is no provision of basic infrastructure in these private residential layouts even though they are registered and approved by the planning authority with the layout plans showing road network. In reality, the road networks are only on paper and not physically available.

Homeowners are responsible for opening up new roads or extending existing community roads provided by other settlers to their residence. The study revealed in chapter 7 that the maintenance of these roads is carried out through collective efforts

of residents and made affordable by collective contribution, payments of compulsory development levies, monetary and material donations from members of CBOs. Specifically, findings revealed that there is increasing community participation in infrastructure projects that require local contributions and minimal expertise or technical knowledge, while CBOs seek external assistances regarding execution of projects requiring technical expertise and huge finances which is beyond community capability and affordability. A good example is asphalt covering of local roads which are often left for government agencies. Although it can be contracted out but communities do not have the financial means to implement such a project and so at a disadvantage of providing required resources. Also the fact that road infrastructure is a network connecting several communities and local communities can only claim ownership of the portion within their neighbourhood.

On the other hand, all the CBOs in the case study preferred individual self-help provision of water infrastructure. They considered it advantageous or economically viable rather than collective actions because of limited resources. It is practically impossible for CBOs to connect water supply to every house without external assistance therefore participation in water infrastructure is limited to individual provision. Water provision is optimal when the source of supply is within residence (21.67%) or at intermediate level within users' compound (28.33). About 61.67% of respondents get their water supply which is used for domestic purposes such as cooking and hygiene from hand-dug well. Self-provision means increases the availability, accessibility and affordability of water supply for domestic use but have minimal influence on drinking water supply because of the quality of the well water. This study also revealed that residents are willing to give water to their neighbours and sometimes sell it. This confirms Mustafa and Mir (1999) stand that effective participation should lead to socially acceptable, economically feasible and efficient projects. The individual approach to water provision is simply a solution to CBOs lack of resources and external support. The problem is that CBO members can sometimes misjudge the approach or interest of their leaders or other members to articulate and represent the collective interest especially where there is lack of transparency and distrust which can sometimes result in conflict.

Beyond looking at the influence of community participation on adequacy of infrastructure projects, the study also revealed that community participation has great impacts on participants such as sharing of the benefits. It is stated in literature by many authors that community participation is a time wasting exercise, however it has both social and economic impacts which invariably improves participants' well-being.

8.4.2 Impact of Community Participation on Participants.

- **Social Impact:**

"*Community participation is a strategy that provides people the sense that they can solve their problems through careful reflection and collection actions" (Zakus and Lysack, 1998, p. 2)*. On the contrary, Cornwall (2008: 278) is of the opinion that *"being involved in a process is not equivalent to having a voice. Voice needs to be nurtured".* Some respondents claimed they were able to express their opinion without fear of retribution while a respondent in the low income community (Ijoka) felt his opinions were not welcomed by other members of his CBO because of their level of education although there is no guarantee that their demands will be met. Nevertheless, it was much easier as a group to assert their rights, make demands or confront local authorities as seen in the case of Awule community protest rally. Even though the protest did not yield instant results participants were gratified that the rally was broadcasted and published in most state and national news media thereby drawing the attention of the government to the needs of the community.

Lastly the study revealed that community participation helps to nurture community attachment and promote a sense of belonging. The refusal of government agencies to attend to individual request for infrastructure provisions except through an organisation or as a group facilitated and promoted community cohesion in all the communities as social ties was formed among residents as they work together. Community participation also improve interpersonal relationships among new homeowner/residents and long-time residents. It helped build consensus, confidence and capacity among residents as demonstrated by the activities of the Asuwamo Women Association in Awule Community. They not only provide financial assistance to one another but also moral and physical support such childcare, carpool etc. This

confirms Khwaja (2004), opinion that community participation provides social support which is beyond sharing of information otherwise it will simply be replaced by 'asking and telling'.

- **Economic Impact**

One of the objectives of community participation is cost-sharing. This study shows that participants and CBOs are able to share the cost of construction and provision of infrastructure among residents. This reduces the financial burden as opposed to provision through individual efforts especially regarding road infrastructure. While it may be possible for a service user to disconnect from public water supply where available, it is impossible to do same with road infrastructure. Road network is the only form of transportation in the study area and there is no other alternative form of transportation such as railway. Residents depend on road network for their daily use and economic activities. However, bad roads usually cause loss of travel time. Road users spend more time avoiding bad spots which sometimes lead to traffic congestion during rush hours. Likewise, bad road also causes road users to spend more money on car repairs and transportation fare. In order to reduce the frequency of damages and expenditure of repairs, residents prefer to pool resources together to find temporary solution to road maintenance in order to reducing the negative impact of the bad roads.

On the negative side, community participation is increasing the financial expenditure of participants. Many of the participants are owing their CBO's as their income cannot accommodate additional spending. This is why many authors consider community participation as expensive because participants sometimes have to forsake certain comfort or privileges to meet the financial demand of their CBOs. Others that have no means of paying the imposed levies chose self-exclusion or will rather free ride on the benevolence of other community members. Likewise, the study shows that none of the respondents interviewed are paying tenement rate (council tax) and water rate which invariably means reduction in the government revenue.

Lastly, community participation is expected to lead to ownership of infrastructure which can be a means of exerting influence or bargaining power. While this is possible regarding water infrastructure, it is practically impossible regarding road infrastructure.

Ownership is defined as the residual control over a physical property or tangible asset (decision) (Kwaja, 2004). The Nigerian Land Use Decree of 1978 stipulated that the state government has the right to revoke ownership of land/uses where they deem it has overriding public interest. Therefore, claiming ownership of road network is subject to these decrees and limits the impact of community participation. This buttresses Kwaja (2005: 429) argument that the "*notion of participation is incomplete as it misses the role participation plays as a means of affecting the distribution of power and ownership.* This study however confirmed World Bank's (1996) and Narayan's (1995) opinions that communities can only claim ownership of decisions, resources, project initiatives, planning and implementation. Claiming ownership of physical facilities in most cases are affected by laws and policies excepts where such ownership is supported by institutional arrangements. Furthermore, residents of the government residential areas are allottees and have limited control over the development of the estates which includes their property. They are required to commence the development of their residential property within the first two years of the purchase of the plot of land failure otherwise their certificate of occupancy will be revoked.

8.5 Challenges to Participation

There has been many researches regarding the disadvantages of community participation. This section will mainly focus on the challenges to community participation in infrastructure development in the case study.

8.5.1 Lack of Finance

Inadequate fund is a major constraint to the success of community participation in the study area as all the CBO's are struggling to implement and complete their communal projects because some members of the association did not pay their monthly dues and development levy. While some just cannot afford the payments or pay in instalments, many struggled to pay their contributions. Some members of these selected CBOs are civil servants and pensioners who depend solely on their salary and pension funds but are being owed several months' salary/pension by the government. Unless they are paid, they won't be able to make any monetary contribution. This is one of the reason that most CBO's are only involved in temporary measures like grading of roads.

8.5.2 Deep-Rooted Social and Economic Divisions

This include educational inequality and economic hardship, lack of trust etc. Akure city being a capital of a state renowned for education implies that many of the residents are educationist, civil servants, or retirees. Education inequality sometimes is the cause of social division among participants especially within communities located in the low-income residential zones. Findings suggested that level of education plays significant role in ensuring active participation in communities located near academic institutions for example, Abaoyo and Awule communities. Many of the participants are students, government workers and university lecturers, meaning that they are also economically empowered to financially support community participation. This requires a level of trust which is an important requirement for sustaining community participation and social relationship as participants entrusted their finance, authority and goals into another to act on their behalf. However, tension and conflicts can occur where there is lack of trust; abuse of authority and resources most especially where community leaders fail to ensure beneficial collective interest and active collaboration. On the other hand, the study shows that trust is crucial to the outcomes of participation and participants find it easier to accept the decisions of their CBO leaders as in the case of Awule and Abaoyo – FUTA area communities especially in the case of an emergency.

8.5.3 Political Interest

Political influence is a major challenge to the outcome of community participation which made some authors challenge the true nature of community participation. Some residents are simply involved in local participation in their communities because they are nurturing political ambitions and the community association is seen as a platform to gain popularity. Although having a politician as a member of community association in some instances can be an advantage as evidenced in Awule and Obaile community where they help to facilitate the approval of government projects in their communities. On the other hand, some politicians prefer to take advantage of their membership of their local community associations in order to secure their votes which is sometimes easy to achieve because they have followers and allies who are also members of their communities. Inevitably they reduce or stop participating after winning their election.

8.5.4 Administrative Barrier and Poor Dissemination of Information

Administrative barrier can arise a result of the action and attitude of the government officials and community's gate keepers who are usually community or CBO leaders. They sometimes prevent information from reaching other beneficiaries in the local community by erecting barriers in order to seek personal gratifications and selfish interests. Lincoln *et al.* (2011) are of the opinion that unrestricted decision-making and sharing of information between stakeholders is not a real but only an ideal situation. The study revealed that not much information is shared between government officials and the local community and any little contacts is through the community leaders as it is in the case of water agency and local government.

Although the local government is supposed to be the closest level of government to the people, most community associations are not aware of the responsibility of the local government, so much that sometimes when they are invited for meetings they don't attend. The study revealed that only two out of the twelve CBOs selected are registered with the local government even though the registration fee was waived to encourage community association to register. The importance of registration was not disclosed to the CBOs as it is a compulsory requirement for accessing government and international donor (World Bank) financial assistance for infrastructure development and poverty alleviation. Some CBO's approved projects were held back and was only discovered by CBO leaders during the stakeholders meeting conducted to provide feedback to research participants. Likewise, some communities and CBO leaders withheld information from association simply because they were absent from meetings. The success and sustainability of community participation requires transparency. Poor dissemination of information is a major factor causing some communities members to be hostile towards government staffs and contractors and this sometimes lead to exclusion.

8.6 Infrastructure Development and Participatory Development: The Challenges for Integration

8.6.1 What are the Challenges to Infrastructure Development?

This section discusses the various concerns that emerged from the chapters that reports on the analysis carried-out in relation to approaches to infrastructure development. The primary challenge to infrastructure development in the case study

is overdependence and inappropriate implementation of budget. As pointed out by Opawole *et al.* (2013) budget implementation at all levels of government in Nigeria is poor thus resulting in persistent disparity between the actual and projected budget figure. The problem of inadequate funding is further compounded by poor physical planning by state leaders and legislators in charge of identification, planning and allocation of funding for infrastructure provisions. The study revealed that government officials who are professionals and experts have minimum contributions in the planning for infrastructure development.

Oforeh and Alufohai (2006) pointed out that plan for infrastructure development are carried out based on budget allocations by policy makers who lack the required knowledge of the technological complexity involved in infrastructure constructions. Planning of infrastructure development is more than just identification or implementation but include consideration of environmental, economic and social factors. It should also be in line with laid down guidelines for physical planning which is a guide to influence, direct and control development. Various methods are employed such as master plan, structure plan and sustainable development approaches (Aribigbola, 2010). The development agencies in Akure city adopted the use of master plan and layouts plans which are also backed up with various policies from the central or local government such as Ondo State Economic and Empowerment Development Strategy (ODSEEDS). The study shows that both the master plan and ODSEED policy used by development agencies and planning authority in Akure has expired

Since the master plan expired in year 2000, it has not been reviewed meaning it has not yet taken cognizance of the changes in the land use pattern of the city nor provide appropriate plan for infrastructure provision. Consequently, most of the new residential areas emerging at the city periphery still retained rural status on the master plan of the city but because of the proximity it is considered an urban area by development officers. The implication is that the suburban area is classified based on the perspectives of government officials and neglected by the various development agencies involved in infrastructure development. Multi-organisation and sectorial approach is the strategy adopted by the Nigerian government towards decentralisation of roles and responsibilities of government regarding road and water infrastructure.

This is in order to achieve equal distribution and achievement of government objectives and policies.

The study identified 10 government agencies that play major roles in infrastructure development in the case study. The study revealed an institutional framework that accentuate the dominance of top-down approach in provision of public infrastructure in the case study. Furthermore, there is no interaction, co-operation and collaboration between key government agencies while there is limited collaboration between community driven development (CDD) agencies and local community. There is no CDD agencies in charge of the provision of infrastructure in the suburban area, rather two of the agencies are operating in the rural area while the third is responsible for urban area of Akure city. The activities of the CDD agencies are also not monitored by the regulating agency which makes it difficult to integrate the objectives of the CDD with the objectives of key development agencies in Akure. Rather all the government agencies involved in road and water provision in Akure are operating independently and are responsible for different areas of the city. They have different objectives and divergence purpose as highlighted in the existing institutional framework in Akure. Also, the fact that their activities are not regulated makes it difficult to achieve even distribution and adequate provision in the case study.

Dalai-Clayton *et al.* (2003) and Hamzah (2010) stated that there must be active interaction among the various agencies for an institutional framework to be deemed effective. They must work towards a common interest and must make rational decisions which usually involves inputs from various agencies and the local communities. But in arriving at rational decisions, stakeholders must consider various factors such as cultural, political, economic, psychological, sociological, emergency and timing and other contextual and environmental considerations (Guitouni and Martel, 1998). Such a decision cannot be taken lightly as activities of development agencies in Akure are guided by policies, therefore they must work towards achieving a common goal. The adoption of participatory approach will enhance collaboration among the agencies and will also improve the provision of adequate infrastructure.

8.6.2 Participatory Development: The Way Forward

Multi-organisation approach is a method often used to achieve decentralisation of roles and responsibilities. This allows different organisation to focus on different sectors of infrastructure development and it is based on the assumption that the involvements of several organisations will promote equal developments and distributions (Hamzah, 2010). However, multi-organisation requires extensive coordination and institution structure which will guide the operations and activities of the agencies. The objectives of establishing regulating authorities were to ensure effective monitoring and implementation of government development plans and priorities by development agencies and other stakeholders. However, Kumar (2000) is of the opinion that it is often difficult to achieve control despite the promise of monitoring if it is not institutionalized.

Presently the activities of the development agencies are strongly controlled by state government, there is no comprehensive development plan like master plan of the city or development plans. Agidi (2015) reported about the new Ondo State Development Plan (ODSDEP) proposed by the state government in the Hope Newspaper publication of 30th of November, 2015. The new plan was developed by an international consulting firm and will be an overall strategy for the sustainable development of infrastructure in the state. In the words of the Commissioner for Economic Planning and Budget;

The plan to be developed has far reaching pay-offs as it will guide development process in the state in years to come. It will also enable Ministries, Departments and Agencies of government to know how to develop and direct their sector plans and provide the sounding board against which the various sector plans will be evaluated […] The submission of each MDA through their representative must be the collective aspiration, the wishes and decision of the management of such MDA" (Agidi, 2015).

The last development plan was a five year Economic and Empowerment policy which was implemented between the year 2005 and 2008 though it was further extended till 2010. Since then planning for road and water has been at the discretion of legislature and the budget allocation. Without a development plan, there will always be shortfalls which in turn limits the success of the multi-organisation approach making it prone to ambiguity, lack of common purpose, conflict and inconsistency where there is no collaboration between development agencies especially at the management level (Flyvbjerg, 2007; Hamzah, 2010). Collaboration is based on shared authority and

participation which is non-hierarchical in nature. Findings shows that there is no collaboration among stakeholders involved in the road and water infrastructure development in the study areas. There is need for equal hierarchy among stakeholders ranging from top government officials; traditional leadership to CBOs leaders with powers attributed to each officeholder as community participation is based on fairness, equal opportunity and rationality which will allow participants to influence others decision without any threat or tactics.

The incorporation of participatory development approach into the infrastructure development process will help eradicate the weaknesses of the multi-agencies and also promote the stakeholders' participation in the decision making and implementation process, thereby limiting conflict of interests and process and will serve as a good learning process for decision makers and stakeholders. Local government officials have critical roles to play since they are responsible for the bulk of the road infrastructure construction in the suburban which are inadequate and of poor quality due to inadequate resources. They are also the closest level of government to the local communities and have better advantage to access local information but has been unable to utilise this opportunity. The use of participatory development approach will correct this anomaly and will enhance complementary collaboration between inter-government agencies and at the same time improve participation of local community.

Participatory development approach will further enhance the functions that only government agencies government can perform such as provision of finance, capacity building and technical expertise; while it will improve the control of the local community over decisions, implementation and ownership of projects. It will involve inclusive participation and willingness of every stakeholder to be involved in the process of infrastructure development which includes goal formulation, identification of needs, planning, implementation and monitoring and feedback. There will be need for exchange of information and relationship between stakeholders such as academic, government agencies, sector etc.as depict in Figure 8.1.

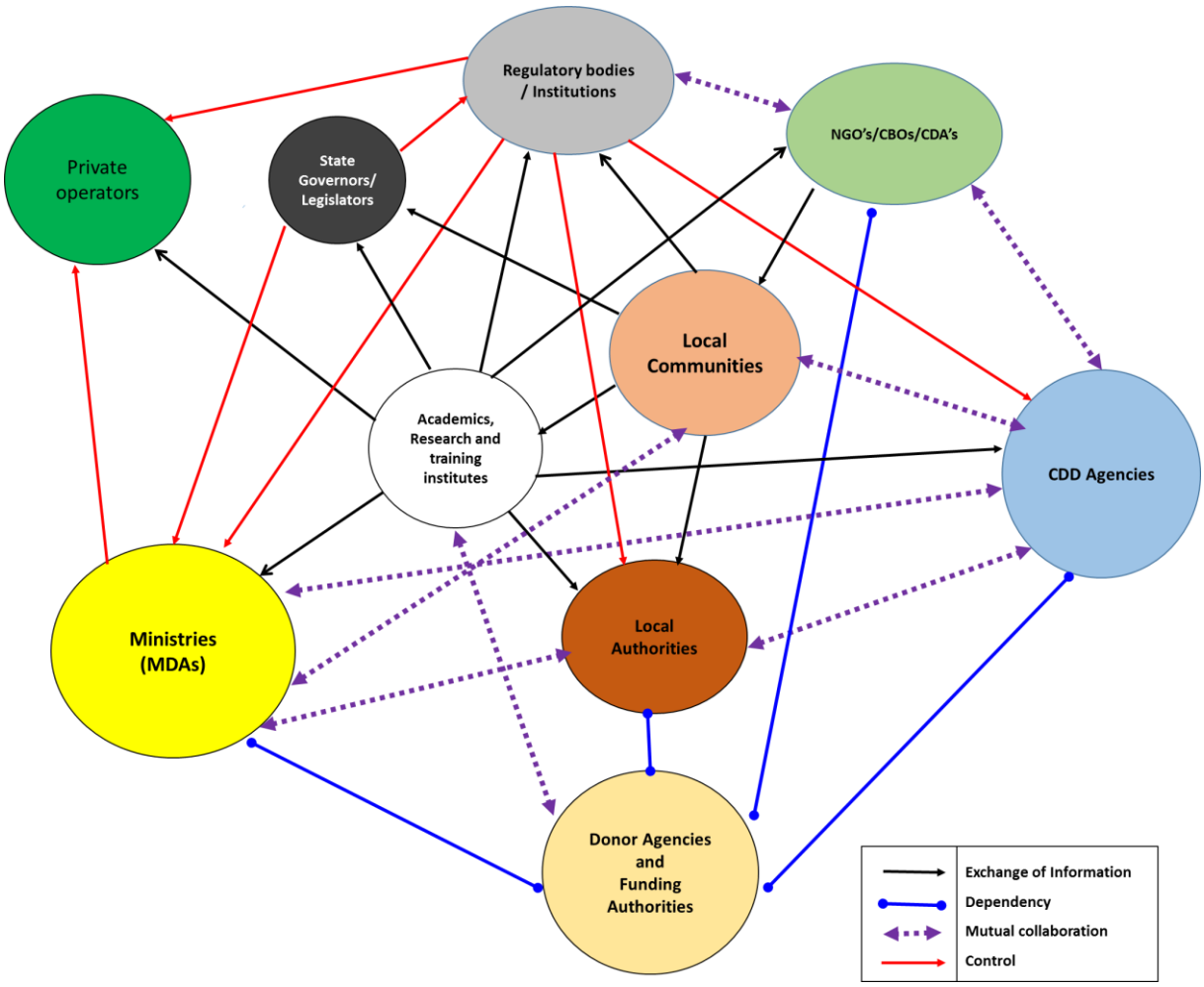

Figure 8. 1: Proposed Stakeholders' Relationship.

There will be need for the scope of planning process for infrastructure development to be widened to include choices of future goals. Many developed nations rely on innovations and data from the academic communities to improve service provision, this is lacking in road and water infrastructure development in Nigeria. Other sectors like agriculture and health thrives largely and depends on research conducted by academics for advancement and future developments. The same can be exploited to improve road and water provision and will require collaboration with academic communities such as research institutes. Also adequacy of infrastructure provision is largely affected by rate of urbanisation and population growth. Therefore, there is need to include future plans to capture increasing demands, expansion and improvements, as quality of infrastructure is affected by usage, quality of construction and maintenance.

The study shows that most development agencies lacks the proper maintenance culture. This is a major reason for the neglect and poor condition of road infrastructure while local communities do not have the required expertise to carry out quality maintenance of roads. The same is applicable to water provision as all the water pipes and stand pipes were damaged and stopped working due to poor maintenance. For example, Obaile GRA used to have public water supply within residences up till year 2001 before it stopped while Ijoka communities used to have stand pipes where local residents collect water for drinking and domestic use but the study revealed that the remaining communities does not have pipe borne water. There is need for retraining government officials regarding facility management.

8.6.3 Role of Institutional Framework

Integration of participatory development will remain elusive and ineffective if government institutions in charge of infrastructure development lack the capacity to collaborate and complements each other's effort (Clayton *et al*., 2003). Community participation can positively improve the impact on infrastructure development if institution framework and the role of key government agency are redefined to accommodate broad-based interactive participatory process such as change of role from provider to facilitator. Also community based organisations also need to imbibe the new change role from passive observers to decision makers in order to provide an enabling environment to operate, increase residents' participation and collaboration in order to be empowered. Bowles and Gintis (2002) in Alexiu and Sordé (2011, p. 9) are of the opinion that;

> *"Communities can sometimes do what governmental institutions or even markets fail to do, because their members have crucial information about other members' behaviour, capacity and need, information that is often hard to access by someone from outside the community".*

Collaboration will promote the process of participation between CBOs and government agencies towards achieving common goals and solving community problem locally. Treisman (2007) further considered partnership as a means to manage increasing interdependencies between various stakeholders. It could be

linked to network and forms of governance where stakeholders try to solve common problems through co-operation rather than through central control (Susskind and Cruikshank, 1987; Costanza, 2013). Partnerships could also be an effective tool for successful integration of participatory development by promoting interrelationship between government agencies and private sector organisations. This is achieved through provision of financial, technical and human resources to achieve infrastructure development goals. However, the success of partnership depends on participatory development approach which will allow interactive process and support between stakeholders (Hamzah, 2010). Brinkerhoff (2002) outlined the characteristics of partnership to include; combination of consultation, negotiations; bargaining; shared understanding; interdependence between partners; consensus and trade-off between various interest groups to address joint problems. Sridharan and Simatupang (2013) however argued that there must be cooperation, accountability, mutual trust and a desire to achieve a common goal which result in alteration of prevailing administrative structures where necessary.

Investigation however reveals that government's introduction of community driven development programmes in Akure city was to promote partnership between government agencies and local communities. The agencies make use of participatory development approach where government provided 80% of cost of construction, technical expertise, and training while recipient communities are required to provide the remaining 20% of the cost of projects, conduct needs assessment and be in charge of the decision making, planning, implementation and management. The state government in conjunction with World Bank plans to introduce participatory development to infrastructure development process and to increase local community participation. The CDD agencies make use of bottom-up approach where local communities are in control of identification, planning, implementation and management. The state government CDD initiatives are a good and positive way towards participatory development but a major constraint to the success of the initiative is poor institution arrangement.

The infrastructure provision in Akure suburban area was neglected based on poor administrative delineation while the CBOs in Awule and Ijoka communities were only able to benefit from community driven development programmes because of their

partnership with neighbouring rural CBOs. Presently, there is limited opportunities for suburban communities to explore government community driven development programmes unless the institution framework is revised. State government concentration of community driven development programmes in particular areas of the city is failing to promote equal opportunity; distribution of infrastructure development and effective institution framework. The stakeholders meeting between all stakeholders' involved in infrastructure provision in the case study revealed that many CBOs are not aware of various opportunities and possibility of networking with other CBOs. Their leaders do not know how to access government funding and benefit from the CDD programmes due to lack of information because most of the CBO's in the case study are operating in isolation.

There is lack of knowledge or information about activities of other groups and associations operating within the same neighbourhood. Rather, what obtains are various pockets of participation even where communities are sharing common facilities like transformers or roads. This affects the outcomes of the participation efforts and development process. Most CBO's failed to recognise other local organisation, groups or economic base associations like Association of Welders, Mechanics or Hairdresser. Members of these associations or groups also make use of the infrastructures provided by the communities and should be encouraged to participate in community self-help projects as their income generation depends largely on availabilities of these infrastructures. Collaboration among CBO's and government agencies will improve the source of finance and possibly the quality of project and it is an effective method to breaking any rigid boundary. Harbin *et al.* (2004) and Hamzah (2010) described state government agencies as autonomous institutions having separate missions, approach, resources and most importantly separate boundaries.

Government agencies need to work with other stakeholders particularly academics and research institutes in Akure where various researches are conducted which could enhance the productivity of government agencies. For such successful collaboration to promote effective participatory development it will require strong leadership, collaboration and communication. While strong leadership can be provided through regulatory agencies to ensure the effective use of allocation of resources and adherence to institution frame work; integration of participatory development approach

and collaboration will require time, commitment and patience. The advantage of local community involvement in government decision process include empowerment and reduction of community–expert dichotomy whereby development agencies marginalises the interest and control of local community because they think they know what is good for a community. Participatory approach will also improve local community's control over decision, availability of finance, improved technical expertise and where development officials considered other participants as innovative team member, it will foster partnership, capacity building and empowerment.

8.7 Chapter Summary.

This chapter provided a link between infrastructure development and community participation. It examines main findings in chapters 5, 6 and 7 in light of existing literature in order to assess the impact of community participation on infrastructure. It established that the incorporation of community participation infrastructure development process will require willingness of stakeholders to collaboration. It also establishes that an effective institutional framework should influence partnership between stakeholders which will further provide an appropriate setting and structure for a participatory approach to take place for better implementation and management of infrastructure development programmes. Also, it acknowledges that every individual and organisations have choices which is their power and ability to make certain decisions based on their priority.

With regards to local community participation, the culture of collectivism and time perspective determines resident's choices while government officials chose established top-down approach. This factors explain the reason stakeholders participate at different levels although that some stakeholder chose self-exclusion or non-participation does not in reality translate to unwillingness but due to more pressing obligations. Lastly, it was established that the impact of community goes beyond improving adequacy of provision and a means to an end, it also has economic and social impact on participants. The social impact includes community attachment, sense of belonging, moral and physical support while the economic impact includes cost sharing and ownership of projects. It also increases expenditure or financial burden of participants and lastly various barriers to participation efforts in the case study was

highlighted. Recommendation on how to improve community participation and the adequacy of infrastructure provision will be proffered in the next chapter.

Chapter 9. Conclusion

9.1 Introduction

"…. …. matters are more complex than would seem to be the case from the often-used distinction between participation as a means, often equated with 'instrumental' participation, and participation as an end in itself, what has come to be regarded as 'transformative' participation. This is because the intentionality of those who initiate community participation or use participatory methodologies to facilitate community development is only part of the story. "Participatory interventions may result in effects that were never envisaged at the outset. The most instrumental variants of participation can provide the spark, in some contexts, that can lead to popular engagement around particular issues or to changes in attitude……." (Cornwall, 2008:274)

Urbanisation and rapid population growth is an unstoppable process however its effect is more pronounced on adequacy of infrastructure provision leading to shortage and increasing demand. The failure of the Nigerian government to meet the demand for infrastructure with a corresponding supply is resulting in gross inadequacies and deficiency which is more pronounced in certain areas like the suburban area. Furthermore, the importance of basic infrastructure to quality of life and economic growth is forcing suburban communities in Akure to employ community participation as an alternative means of meeting their needs. Community participation is a well-established strategy employed by disadvantaged communities as panacea to provision of infrastructure and the inadequacies of the government. It is considered as an acceptable means to an end, in this context road and water infrastructure and it is gradually gaining ground.

In addition, local community participation is strongly encouraged by many intergovernmental organisations in form of community driven development and it is considered as a way of ensuring that local needs are met and that communities are in charge of development. Community involvement and consultation is an established practice in developed countries, no wonder many government organisations like World Bank is making it a compulsory condition for rendering financial and technical assistance towards infrastructure development in many developing countries. Institutionalising community participation as an approach to infrastructure development

in Nigeria is challenging because of the method of governance and conventional top-down approach. The ever increasing challenges of meeting demand for public infrastructure provision and the need to reduce public spending is forcing many developing nations like Nigeria to accept the conditions of bottom-up approach. Beyond acceptance is the issue of implementation and the problem of expert-community dichotomy where development agencies are in charge of the decision-making process and provision of infrastructure development. This study however assessed the impact of community participation to infrastructure development

Overall this dissertation examined various interrelated issues regarding the application of community participation to infrastructure development such as the different roles of government agencies and communities in the provision of road and water infrastructures in Akure suburban area. This study also investigated the processes and approaches involved in the provision of the adequate infrastructures and factors influencing its provision and how it can be improved. Having presented the summaries of findings in the conclusions at the end of each analysis chapters (5, 6 and 7) and discussion of findings in chapter 8; the aim of this final chapter is to draw together the interrelated issues that were raised in the study by revisiting the research questions and references to findings will be made as each question is discussed in turn.

9.2 Back to the Research Questions

This research questions the impact of community participation on infrastructure development. The intricacy of the question requires the construction of a framework to help in understanding the concept of infrastructure development and community participation and a macro and micro level of analysis was employed. This was done to aid the analysis and interpretation of data. The macro level analysis was achieved by exploring the issues surrounding the concept of infrastructure development, approaches adopted for provision of infrastructure and adequacy measure (Chapter4). Central system, decentralised and private sector provision were identified as common approaches to infrastructure provision.

Four factors for assessing the adequacy of infrastructure were also identified, they include availability, accessibility, affordability and quality. An overview of infrastructure development in Nigeria was provided in Chapter 2 which shows a gap in the public

provision of infrastructure in Nigeria with local government having 66% responsibilities of road infrastructure. The state government is in charge of provision of pipe borne water, Akure city inclusive. Chapter 3 explores issues regarding concept of community participation and the various typologies of community participation in relation to infrastructure development. Participatory development model which is the theoretical framework underpinning the research was also reviewed. A framework for analysis of data collected was presented and it includes who, where, how and what of community participation.

The micro level analysis assessed the existing institution framework for road and water infrastructure provision in the case study and the role of stakeholder (government) was central to the analysis (Chapter 5). The institution framework explained the roles and responsibility of all the 10 government agencies while government provision in the case between 2007 and 2011 was presented in Chapter 6. The involvement and contribution of local community to adequacy of infrastructure provision in suburban areas of Akure city was examined in chapter 7. Providing a link between the macro level and the micro level analysis is important in order to provide credibility to the research.

Case study research design was adopted using a qualitative research strategy. Multiple methods of data collection were used in the study in order to reduce bias. Data for the study was grouped into two; existing government provision and community self-help projects through participatory process. For data on existing government provision, relevant document and interview of key government officials of the ten government agencies in charge of road and water infrastructure provision in Akure was conducted. However, for community self-help projects, data concerning local participatory process, in-depth interview and focus group discussion was conducted with residents and community/CBO leaders of five communities. Visual observation of the infrastructure projects and stakeholder meeting was conducted in order to validate data collected from key government officials, the residents and CBO leaders. The methodology employed helped to increase objectivity and minimize researcher influence while projecting respondents' perspectives. It also helped to validate data collected and knowledge of respondents about community participation and other information

provided. It was useful in achieving the aim and objectives of the study and provided questions for further area of study

9.2.1 Process, Approaches and Institution Framework for Infrastructure Development

- *What are the process and approaches to infrastructure development and what is the existing institutional framework in Akure city?*

The first aim of this study was to examine the process, approaches and institutional framework for public provision of road and water infrastructure in Akure suburban area. This to understand the roles and responsibilities of government agencies and the contributions of government provision to adequacy of infrastructure development in the study area. To achieve this, aim the study examined the institution framework in chapter 5 while contribution of government to adequacy of infrastructure and level of community involvement government project was examined in chapter 6. The conceptual framework presented in chapter 2 revealed the need for an appropriate approach, source of finance and good institutional framework. Institution framework of an organisation includes administrative hierarchies, types of organisation, budget mechanism, legislative and decision-making procedures (Lowndes, 2010).

The followings are the major findings; 1) State government controls the activities of all the development agencies including the local government that is constitutionally supposed to be autonomous; 2) State government adopted multi-organisation and sectoral approach in provision and allocation of the roles and responsibilities of development agencies; 3) Each government agencies is autonomous and they all rely on budgetary allocations as the only source of fund; 4) Key government agencies adopted top-down approach to infrastructure provision while community driven agencies (CDD) make use of bottom-up approach; 5) There are overlapping of responsibilities as the regulatory agencies are the major providers of road and water infrastructure in Akure suburban area; 6) There is no collaboration or exchange of information between the key agencies and neither with the CDD agencies; 7) There is no arrangement to involve private sector in both road and water infrastructure development in the institutional structure; 8)The local communities are not involved in in the key agencies projects but are actively involved in the CDD projects. 9) There is

no specific mechanism for addressing public complaints except for a law suit which could be expensive and beyond the capacity of local communities.

The research has shown that multi-organisation and sectorial approach are adopted by the state governments in the provision of road and water infrastructure in Akure city. The government organisations include, ministries, agencies and local government. The study identified nine state-based agencies and one local-based agency, but only the local based agency (AKSLGA) is responsible for road infrastructure in the study area while Ondo State Water Corporation (OSWC) is the major water provider. All the activities and programmes of government agencies are controlled directly by the state governor and the House of Assembly[9] (legislative arm of government). This implies that central approach is used at all levels of government even though infrastructure provision is decentralised however, all infrastructural development projects are approved by the state governor and determined based on budgetary allocation. The implication of this is that the development agencies has no input in the determination of the total number of infrastructure projects they develop every fiscal year nor the direction of developments. Each agency gets directives and instructions from the state governor through their head of organisation (commissioners and directors), also each government agencies are allocated to meet the infrastructure needs of different areas in the state and so allocated to sectors.

However constitutionally, Akure South Local Governments has the highest responsibility of providing road infrastructure in Akure suburban areas while at the same time meeting other infrastructure needs of the suburban area. The 1999 Nigerian Constitution divided the roles of the local government authorities into exclusive and concurrent. The exclusive roles are solely the responsibility of the LGA, the concurrent are collaborations with the federal and state governments. The construction and maintenance of local access road (Trunk C) are the exclusive responsibility of the Akure South Local Government Authority (AKSLGSA) and it includes the provision of drains, street lightings and other public highways and facilities as prescribed by the

[9] House of Assembly is the legislative arm of government, the chamber of legislature for state and comprises of representatives from all the local government areas within the state. It checks and balances the powers and actions of the state governor and the same time makess laws for the good governance of the state.

House of Assembly. AKSLGA is still under the control of the state legislative arm of government even though it is supposed to be autonomous.

The study established that AKSLGA operate a narrow financial base, mainly allocations from the federal government and grants from the state government and therefore lacked the financial capacities to meet the increasing demand for road infrastructure due to poor revenue generation. The research shows that even though every local government in Nigeria has the prerogative to collect tenement rate[10], but this source of revenue is being neglected while resident refused to pay likewise. The implication is that the local government will continue to rely of budgetary allocations and will continue to struggle to meet their responsibilities while lack of basic amenities will continue to be a protracted issue. The study further show that other state-based agencies also rely on budgetary allocations from state government and they are autonomous in their operations.

Some authors are of the opinion that the use of fragmentation of authority and overlapping jurisdictions can improve the effectiveness of institutional arrangements for the delivery of public services (Hamzah, 2010; Ostrom, 2011). However, in the study area, it is failing to deliver adequate and equal distribution infrastructure. The fragmentation in the sense that each agency has separate domain and boundaries; and responsibility, therefore any area of city that is not included in their budget and plans are neglected. The two regulatory agencies for road (Ministry of Works) and water infrastructure (Water Corporation), respectively has no control over the activities of other development agencies but are simply operating as service provider. This is resulting in conflict of roles and duties as more attention is paid to delivery of infrastructure than regulation of activities of other agencies. The implication is that the needs of suburban areas of Akure city will be undetected except if local communities draw the attention of state government to their needs.

Obviously, with numerous agencies, there is great need for coordination in order to reduce conflict, ambiguity and lack of common purpose. Co-ordination between rival agencies has always proved to be difficult. There is need for separation of roles and

[10] Tenement rate is the equivalent of council tax in UK and it is a property tax paid by homeowners or occupiers of a building to local government councils as part of their internally generated revenue which is used for the development of infrastructures and social amenities

effective monitoring of public provision in order to ensure even distribution. The successful completion of multi-organisational projects involves a very high degree of coherence, unity of purpose especially at the management level. This is demonstrated in the involvement of other government agencies including the local government in the provisions of all types of infrastructure development as described in chapter 2 (section 2.2.2). Lack of coordination is affecting the adequacy of provision which is based on available fund and it is further compounded by lack of a current development plan (master plan). This study showed that there is huge gap in the distribution of infrastructure development in Akure city and there is no way it can be effective without adequate planning and a development plan. More attention is paid towards the development of the urban and rural areas while the suburban[11] areas are neglected. Furthermore, the neglect is undocumented because of lack of interaction between key government agencies.

The establishment of community driven development is supposed to be a partnership between the CDD agencies, the local government, the local communities' and key government agencies. CDD agencies acts as facilitators and enabler by providing finance, training and technical expertise etc. but most importantly they relinquished control to the recipient communities while government take on the role of 'enabler' as suggested by Choguill (1996a). However, requests from suburban areas are rejected because they are outside the domain of the CDD agencies and this further widens the gap between demand and supply of infrastructure development. Collaboration will lessen the impact of inadequate finance as government agencies can jointly implement projects which further improve the distribution and adequacy of infrastructure especially the quality. Unfortunately lack of consultation between government agencies and local communities means that there is limited flow of information and knowledge of suburban communities. The result is inadequacy, inefficiency and poor amenities that do not meet either current or future demand. It is important that stakeholders co-operate and have a clear definition of roles and responsibilities, work transparently and communicate with each other. It is will help in building partnerships, practicable institutional structure and implementation of development plans or policies.

[11] The suburban areas of Akure city are the predominant residential and industrial areas and therefore possess both social and economic characteristics.

9.2.2 Contribution of Community Participation to Adequate Infrastructure

To what extent does community participation contribute towards the provision of adequate infrastructure development in Akure suburban area, Nigeria?

The second aim of the study examines the contribution of community participation towards the provision of adequate infrastructure in Akure suburban area. To achieve this aim, the researcher explored the local perception of the concepts of community participation in order to understand what influences local participation. The process and approaches of suburban communities' response to their local infrastructure need was examined and they include decision making process, who the participants are and level of participation. Furthermore, the community self-help infrastructure projects executed were also assessed in order to determine the adequacy of the projects and if it is contributing to adequate provision in Akure suburban area.

The key findings on the process and approaches includes; 1) participants have clear understanding of the meaning of community participation as it is embedded in the tradition and culture of the local communities even though the communities are heterogeneous in nature. 2) Lack of adequate provision, attitude of government officials, bureaucratic process and slow response to requests etc. are the reasons many residents chose community participation as solution to their infrastructure inadequacies. 3) Landlord/residents' association is the predominant CBO involved in the provision of infrastructure development in the suburban areas and participants include both homeowners and tenants including women and there is no restriction on membership 4) There is constant (monthly) meeting and the decision process is by consensus and voting and it is mostly bottom-up except in the case of emergency where CBO leaders have to take unilateral decision. 5) 68.3% of respondents in the selected communities are actively involved in community participation while 20% of the respondents are passive participants who were merely informed and education status only affected level of participation in low income community 6) Women are proactive and involved in community self-help and it is creating mutual support. 7) The major source of finance for all the CBO's projects are monthly contributions and compulsory development levy but not all communities give a detailed financial account to members and they don't have sufficient record of their finances or activities either.

Other findings on contributions of community self-help projects to adequacy of infrastructure development in the Akure suburban area includes;
1) There are more community self-help road projects (52.85km) than government road projects (17.75km) in the case study, but CBOs lacked the financial capability, technical expertise and equipment to improve the quality of road projects. 2) There were collective effort in meeting road infrastructure needs although limited to opening up of new roads and grading the existing unpaved road however the quality of the roads is poor, narrowed and unreliable. 3) Water provision is on individual basis and the highest source of domestic water supply is hand-dug well while drinking water supply is borehole and sachet water. 4) There is only intermediate access to domestic water supply while there is no access to drinking water as many of the respondents have to trek more than 1000 metre or more (over 30 minutes) to the source of water. 5) Poor dissemination of information and poor record keeping.

The literature review in chapter 4 shows that community participation in the development context, is a process through which members of an organisation, neighbourhood or community influence decisions related to development activities that will affect them. The implication is that development projects will address the actual needs of local communities. This research shows that inadequate infrastructure and the realisation that government can no longer solely meet basic infrastructure provision is promoting community participation. The local community are left with no choice than to draw on existing structure of community participation to find solution to their needs which buttress Yazdani *et al.* (2014) opinion that the effect of inadequate provision is usually great on service users that they are forced to spend money to obtain poor and less safe alternatives. The Akure suburban communities lacked the financial resources and skills to improve the quality of road and water infrastructure developments within their neighbourhoods.

This research demonstrated that community participation is increasing the accessibility, availability and affordability of road networks and water provision. The level of participation is higher in all other layouts than in Obaile GRA where the study revealed that all the local access roads in were constructed by CBOs and residents through collective efforts. The quality of road may not be good enough to compete in

a modern and increasingly technological society but it is promoting quality of life and economic activities within the locality. Student hostel is a popular property business in Abaoyo – FUTA area and the study shows that many of the hostel are located along the road network. The opening of new roads give opportunity for new hostel to be located along its path and without local community intervention, most of the houses will be isolated with no access road. There are no collective actions regarding water infrastructure rather provision is on individual basis in order to improve adequacy, reduce expenses and conflicts. Accessibility is higher in domestic water provision which is intermediate access as 45% of respondents get their water supply from hand-dug wells while access to source of drinking water very poor. 40% of respondent travels more than 1000metre to get drinking water from boreholes. Sachet water is the next common source of drinking water which is bought at a price and residents are ready to drive or walk several kilometres to get good sachet water. It cost Akure suburban residents time and money to access good sources of drinking water.

This study found that central and top-down to infrastructure development often underestimated the knowledge of the local people and their transferability of culture, norms and values which explains why they are often neglected in the decision process or at most merely informed as demonstrated in this research. Nonetheless community self-help projects and the few CDD projects in the case study revealed that local community can make decisions, plan, implement and manage projects if given the financial and technical assistance. This study established that local communities needs outside assistance if their community self-help projects will be upgraded to a modern and acceptable standard. There is need for collaboration among CBO, government and non-government organisations if the local communities which are the end user are empowered where they have more control on what is happening within their neighbourhood. McCall (2003) proposed a spectrum for assessing local participation, with empowerment at one end; mediation and collaboration in the middle while facilitation is at the other end. The Akure suburban communities have the knowledge of what they need and there is ready structure for implementation (existing CBOs) and in this context they need further assistance to improve the quality of community projects such as upgrading earth surface road to asphalt covering.

This study also acknowledged that community ownership of projects enhance their sense of responsibility and inspiration needed to persistently work towards the

improvement of community self-help project. This is demonstrated by continuous attendance of meetings and payment of monthly contribution even when faced with obstacles. It also brought about a sense of belonging, mutual support and community attachment. However, community's ownership of certain projects may be restricted for example of roads projects especially where such roads network is connecting several communities but there could be constituted joint ownership where all concerned CBOs participates in the management of such project. It is much easier for the community to have ownership of water as demonstrated in several literatures (see chapter 2).

This study also found that generally most of the CBOs do not have records of past activities and the ongoing projects are not documented either. They rely on word of mouth which is not reliable. This hinders the assessment of community participations especially those initiated by local communities and not government or expert initiated participation programme. This information are data to policy makers which the local communities can keep for future use and reference. It will also serve as a guide for future projects. The study also shows that most CBO do not give financial report to members of the association, this is hindering the full commitments of some participants who will like to have a knowledge of the CBOs financial status and also have opportunity to hold their leaders accountable. It is evidenced that the community with the highest community projects (Awule GRA) prepares and distribute quarterly and annual account to members and also report summary of financial records in their minutes of meeting. Lack of information restrict people's knowledge, therefore transparency and accountability on the part of CBO leaders will promote active participation as members can see how their contributions are being used and it will further enhance their choice to participate.

Lastly, having established that community participation contributed to adequacy of infrastructure development in Akure suburban areas, the study found out that the impact of community participation transcends the meeting attendance and the infrastructure needs of the local community. It not only has both economic and social impact on participants it also increases the sense of belonging and community attachment among them as well. CBO members are able to relate better, share mutual support and assistance when needed. It reduced conflicts while it gave participant a common front to voice their opinion and challenge the government. This confirms Mahama and Badu-Nyarko (2014, p. 55) view that "*communities that participate in*

projects find out that, not only do they derive more satisfaction from the joy that comes from open community involvement, but they also achieve more results, more rapidly which benefit the community as a whole". Community participation is not a waste of time rather it enables participants to share the cost of infrastructure provision among themselves and thereby increasing quality of life and mobility of trade and traffic in their communities

9.3 Contribution to Knowledge

This is a comprehensive study of infrastructure problems faced by suburban communities in Akure, Nigeria with particular reference to road and water infrastructure. It provides clearer understanding of the inadequacies of centralised top-down approach and weakness of the existing institutional framework in improving the provision of road and water infrastructure development in suburban areas. This study will assist urban planners and infrastructure developers in institutionalising participatory development approach to infrastructure development and will also address some of the problems faced by the suburban communities in Nigeria.

There is numerous literature on the use of community participation and participatory development approach in infrastructure provision within Latin American and Asian contexts compared to Africa. The study also contributed to the existing body of knowledge on community participation and infrastructure development, particularly the literature of participatory development studies. There is dearth of records of community- driven development and community self-help projects that originated from the local communities in developing countries without any help from outside local and international agencies. Likewise, there are more literature on the successes or failure of projects initiated by government or non-governmental organisations more than community initiated projects.

It is possible that a significant number of sources on community driven projects which Eversole (2010) calls 'local knowledge'; will remain undiscovered except it is documented. There are possibilities that communities may have through their development initiatives improved or failed to improve the adequacy of their infrastructure, but these outcomes are not well documented if at all in the literature. This may be due to the fact that it has not attracted the attention of academics or

consultants who are more likely to record these accomplishments more that the local people who may not be educated. Therefore, many of the community participatory development initiatives have been undertaken quietly and have eluded academic investigation and evaluation. There is also the probability that some of these undocumented infrastructure projects may have failed, if so there is need to make such public as they form a significant contribution to the literature on the process of community participation just as much as the success.

This research examines the use of community participation as a significant step in the progressive improvement of infrastructure development process especially in the sub-urban areas. It identified the factors that influence local community participation, the need to understand the purpose of participation and choice of participants as they all play a central role in their decision and levels of participation. This research assessed the effect of community participations on projects and participant. Therefore, to achieve a meaningful and effective planning, there is a need for people oriented planning and community involvement. The study also hopes to increase the understanding and the importance of 'people-initiative programs' which will assist policy makers in formulating policy that take cognisance of local people view.

There is often a huge gap between the rhetoric of national development policy, planning and the reality as clearly evidenced in this study which requires detail analysis of types of collaboration, interfaces, communication, power relation, norms and values of suburban dwellers and government official. This study exposed the ineffectiveness of government agencies under the state and local level, and thus directly enable a better understanding of the significance of institutional framework.

9.4 Theoretical Implication

This research has explored streams of literature to discuss the different theoretical perspective used in this study; the first is the literature review on infrastructure development (see Chapter 2) and secondly to community participation (see Chapter 3). The findings in this research have verified the contribution of community participation to infrastructure development which can be summarised as three factors; 1) the effect of community participation on improvement of adequate infrastructure development in the suburban areas; 2) its indirect impact on the participants which

increases collective action, community attachment and sense of belonging among participants; 3) also its influence on the sustainability of infrastructure projects. Therefore, assessing the influence of community participation on infrastructure development is very important. For this reason, participatory development theory has been used to analyse the relationship between government and the community and also between CBOs and community

The literature reviewed in chapter 2 revealed the importance of infrastructure development as a major determinant of quality of life and economic growth of nations. There are various factors limiting the efficiency of government strategies to provide adequate infrastructure such as lack of adequate funding. The study revealed the overall reliance of government agencies on budget allocations and the refusal of residents to pay their tenement rate which should have been a major source of revenue particularly to local government authorities. This is limiting the outputs of the development agencies. Also the approaches adopted by the Nigerian government is central controlled and top-down distribution of roles and projects among multiple agencies however there is no coordination of activities. Yazdani *et al.* (2014, p. 64) is of the opinion that *"Coordination in the process of the provision of infrastructure brings together independent development agencies to make their endeavours more harmonious in the interest of efficiency, effectiveness and equity….* The study however revealed that the diversity of government agencies and fragmentation of responsibilities is causing lack of coordination among key government agencies involved with road and water provision.

The problem of lack of coordination is compounded by the sectoral model adopted at all levels of government in Nigeria. Different agencies are assigned to different areas of the city with the aim of achieving even distribution of infrastructure development. However, lack of coordination and communication is preventing information sharing which is preventing all the government agencies from participating in the planning, decision making and implementation process whereby their operations are isolated. This is resulting in overlapping and duplication of activities; higher cost of implementation and uneven distribution of infrastructure provision with supply not meeting demand. There is need for inter-agency coordination where different agencies

work together to accomplish specific objectives. This does not in anyways reduce the responsibilities of each agency rather it enhances their being productive.

The inability of government to meet infrastructure demands subsequently resulted in local communities' involvement in infrastructure provision which in this context are road and water. The process of road and water infrastructure development involves several stakeholders as evidenced in this study which shows government as a major stake holder while the local communities are not active stakeholders. The study further revealed that local communities are forced to complement government efforts through community participation. On the whole this study demonstrated that communities are able to increase the availability, accessibility and affordability of road and water infrastructure in their neighbourhood but they are unable to improve the qualities of these infrastructures. The local communities use their resources to provide their infrastructure need but how much can they provide within the scarce resources without outside help? Their greatest constraints to contribution to infrastructure development are inadequate finance, lack of information and technical expertise. The CDD programmes was to resolve these limitations faced by local communities by incorporating participatory development approach into the infrastructure development process.

Participatory development approach in infrastructure developments ranges from community-led to government-led development initiatives aimed at increasing the supply of infrastructure provision. (Chambers, 1997; Davis & Iyer, 2002; Narayan et.al, 2000). Therefore, can it be assumed to be the most appropriate approach? The CDD programmes will not only improve the qualities of community self-help project, it will also enhance the capacity of the local communities. However, the sectorial allocation of the areas of operations for each CDD agencies are not evenly distributed as the suburban areas are neglected with no CDD agency responsible for infrastructure provision in this area of Akure city. Unfortunately, the remaining key agencies do not have the knowledge of participatory development neither are they willing to adopt the approach into the framework for infrastructural development.

Some critical questions that infrastructure providers need to bear in mind is what strategies exist for infrastructure planning? Are the policies robust enough to recognise the needs of every sector and areas of the city or state? And how can infrastructure development be carried out in a more coordinated way? Addressing these questions will require a pragmatic institutional reform of the framework for infrastructure development to include participatory development approach. It is obvious that top-down and multi-organisation approach is not delivering adequate infrastructure in Akure rather it is causing implementation gap. This confirms (Teisman and Klijn, 2002) opinion that multi-organisation strategy does not really work without any planning and policy as decisions and implementation are often based on self-referring organisation rather than inter-organisation. Likewise, not all partnerships especially in the public sector involves joint decision, cooperation and continuity and it does not always indicate a transformation from autonomous to joint decision making unlike in the private sector, where many planned partnerships have actually been established (Tiesman and Klijn, 2005).

The success of participatory development model depends largely on the capacity of stakeholders to communicate and collaborate through regular relationships and partnership where all parties make substantial resource contributions. Collaboration does not prohibit the diverse interests of other stakeholders rather it enhances their role. In fact Putnam (200) referred to collaboration as coproduction. In Nigeria, the public sector plays the major role as the key stakeholders while other stakeholders such as service users and local community were usually neglected but with participatory development they play a prominent role which is precisely the objectives of the CDD agencies. The research established the need for external assistance from government and aid donors in order to improve the quality of infrastructure development by the local communities as they are unable to afford the cost and the technical expertise.

Furthermore, to implementing participatory development theory, external agency most especially government officials will have to assume the role of facilitator, enabler and advisor as against the conventional role of controller and provider. It will require a paradigm change to the existing institutional framework and attitude of key government

agencies and authorities. The change will need to acknowledge the ability and knowledge of the local community which is the main resource that they possess and it enables them to exercise their power and choice and inevitably gain empowerment. Participatory development may not always yield desire outcomes of projects especially due to lack of clear guidelines, ignorance by participants, inadequate information, control and power of the elite or agency, inappropriate timing for consultation and lack of accountability (Emmet, 2000). Participatory development may result to interaction and partnership but does not guarantee accountability or that government will be responsive to the needs of the local people (World Bank, 2000).

Heller (2012) emphasised the need to consider significant impediments to the reality of instituting participatory development and empowerment which are affected by external political resistance sharing of power, decision and control because local elites do not relinquish power easily. Likewise, communities are not homogeneous and this affects their structure and decision making which results in unequal access to power which sometimes determines local needs, interest, cultural division, age, gender, lifestyle, opinions etc. The evidence in this thesis has shown that there is a huge gap in the understanding of participatory development where developers are required to incorporate community participation into infrastructure development process. Therefore, any changes to the existing institution framework must acknowledge the need for communicative action and collaborative theory, all of which must be embedded in participatory development. Participatory development however has huge benefits which includes helping participants to gain confidence and control, find their voice, and acquire knowledge for future projects (Mitlin and Thompson, 1995b; Imperato and Ruster, 1999; Theron, 2005). Participatory development process is aimed at consensus building and establishing a balance of interests among stakeholders. This will however require institutional flexibility and a willingness of stakeholders to be responsive to change.

9.5 Limitations of the Study

This research has several limitations, Firstly, the selection of communities and the respondents from the target groups was confined to five locations in the suburban areas of Akure city even though there are several communities and other states in Nigeria that might arguably have richer information and cultural diversity. This focused

on Akure mainly because of ease of access to information and safety of research. However, the findings of the study maybe generalised to represent the situation faced by many suburban dwellers in Nigeria even though there are diverse ethnic groups.

Secondly, in an effort to widen the scope of the study, all the development agencies were identified and key officials were interviewed but those interviewed represent only a small portion of government officials involved in infrastructure provision in Akure. Due to time constraints and political situation of the country at the time of field collection it was practically impossible to increase the sampled interview and therefore an assumption was made that the sampled size will provide an understanding on the research.

Thirdly, a qualitative approach was adopted for the research believing it is the most appropriate because of the need for in-depth study and understanding of relatively unknown complexity of communities due to their heterogeneous nature and socio-economic characteristics. Probably using a mixed method with the application of quantitative approach may have encouraged the participation of some local residents who preferred to conceal their identity from the researcher. The above limitations did not in any way invalidate the findings of this research but it only shows that research is onward and that there is always more room for improvements.

Despite these limitations, the study also has some strength worth mentioning. The study was carried out in five communities representing the north, west, south and eastern part of Akure city. The communities also belonged to different zoning classification and ownership (private and government layouts) in order to assess the process and influence of community participation on infrastructure provision in both government and private layouts. It allowed the detailed study of problems faced by suburban dwellers within different zoning classification in suburban area. Furthermore, the study revealed the approach adopted by local communities to reduce the problem of cost of provision of water and road infrastructure in the suburban area of Akure city.

The study also involved interviewing of different groups and classes of people involved in public infrastructure development, community self-help projects and community base organisations. Therefore, there was access to different views from various

participants ranging from the traditional chiefs to highest level officers in the different government agencies and to the residents of the selected communities. The study ended with a stakeholder meeting involving the local CBOs, residents and government officials. It was a first experience for many participants as it afforded participants the opportunity to discuss their community's need with key government officials while they also had access to privileged information such as sources of funding which otherwise they would not have known.

9.6 Recommendation for Policy

The following sustainable measures are hereby put forward as a means of achieving efficient and effective community participation towards the development of the sub-urban area:

9.6.1 Need for Better Community Participation and Capacity Building

Community participation have many meanings and has various applications. As a result, there is need to understand the concept because it is derived from how society can be changed and better organised indicating change, transformational and involvement of stakeholders. Infrastructure development process and participatory development involves planning, interaction, collaboration and dialogues often associated with the involvement of several stakeholders most especially local communities in the planning and implementation of projects that meet the needs and requirement of service users.

There is need for more people-oriented planning for infrastructure development especially towards project development and maintenance. Local communities are often excluded because of the belief that government officials and consultants know the needs of the community better. Local communities should be part of the decision-making process regarding infrastructure projects in their neighbourhood so that government agencies or those responsible for the planning, implementation and management can be held accountable to the projects recipients and for the life of the project.

There is need for maximum co-operation among participants or stakeholders which includes project financier, providers, maintainer and end users (local community). The

financier and executor should take on the role of enabler and must be in partnership with members of the team. As suggested in the theoretical implication, government need to form partnerships with community based organisation and other local organisations involved in community self-help projects in order to improve adequacy of infrastructure development in suburban areas of cities and towns. There is need for other development agencies to incorporate participatory development into their mode of operations in order to take the planning and implementation of infrastructure developments to the grassroots. The involvement of local communities will provide access to information about their needs which subsequently lead to better development projects and increased capacity building of recipient communities.

9.6.2 The Need for Physical Planning

There is need for a physical plan for Akure city which will serve as a guide to developers and infrastructure providers. Akure is an emerging city expanding daily but without development policies and up to date physical plans. The development of the city will be haphazard without plans resulting in slums and many deprived areas. In Nigeria, physical planning is a major problem with infrastructure development due to poor physical planning and lack of up-to-date physical development plan that does not focused more on economic plans. A new integrated physical planning based on comprehensive regional strategy was proposed which will achieve equitable and spatial socio-economic development across all the six geopolitical regions in Nigeria. Plans for regional urban centres such as Lagos, Port Harcourt will be developed first within the geopolitical zones and will later be extended to secondary growth urban centre in every states (Olaseni and Alade, 2012).

Also the success of the Vision 2020 launched in 2009, is based on the availability of a balanced physical and socio-economic development however there is need to facilitate a balanced and sustainable national development which will involve all the necessary stakeholders in the planning, design and development of the plan. In Nigeria the imbalance between the big cities and smaller urban centres and towns is huge as big cities in Nigeria like Lagos, Port-Harcourt have better infrastructure compared with smaller urban centres which has huge deficit of basic infrastructure. This imbalance is a great challenge to achieving harmonious development in Nigeria but the incorporation of participatory development and good planning which involves every

stakeholder will combat this. It will further ensure that the new integrated physical planning will be a people oriented plan which will accentuate the needs of the local community and will enhance the achievement of balanced development in the country.

9.6.3 Adequate Funding and Greater Private Sector Involvement

Lack of finance and investment are major causes of inadequate and poor infrastructure development in Nigeria. It is important that Nigerian government establishes a broad infrastructural fund towards the consistent financing of new infrastructure projects while less emphasis should be placed on the use of budgetary allocation. They also need to be committed towards constant maintenance and improving of all existing infrastructure development. Public monopoly of all infrastructure development in Nigeria has failed to deliver adequate infrastructure provision therefore there is need to privatise some infrastructural sectors such as water, electricity etc. There is need to replicate the achievements of Bureau of Public Enterprises (BPE)[12] in privatisation of the telecommunication sector in 2001 which brought great improvement to the sector. Phone facility became easily accessible and affordable while the quality improved greatly. Likewise, the concept of franchising water supply and sanitation sector was introduced by World Bank in Lagos, December 2003. Privatisation will not only make funding available, it will give service users various options of choosing their provider and it will also bring about healthy competition which can lead to the improvement of the quality of infrastructure provided.

9.6.4 Good Governance and Greater Transparency

Corruption is a major obstruction to provision of adequate infrastructure, it should be eliminated or reduced drastically so as to improve the productivity of the public sectors in Nigeria. There is need for regular auditing, evaluating and monitoring of the progress of all government's development agencies, ministries, departments regarding targets and objectives. Government officials should be held accountable for their poor performance in order to ensure that public money are judiciously used for the purpose it was allocated, it will eliminate the mistrust already created in the minds of service user towards government officials.

[12] BPE The body responsible for the privatisation of Shares of the Nigerian Federal Government in public places

Likewise, service users should be made to pay fair prices for services provided and also pay their tenement rates which is presently being ignored because of lack of basic facilities. It will be a good source of revenue for infrastructure development. The local government should have a process of enforcing the payment of tenement rate such as legal action. Many Nigerians are refusing to pay the tenement rate because lack of infrastructure. This is presently being paid in Lagos state and Abuja which are urban centres having better infrastructures than most cities in Nigeria. Furthermore, good governance and devolution of power to the local community should be enshrined in the day to day business of the local government agencies. Part of the objectives of participatory development is that it gives participants 'voice' which they can equally use to demand for their rights especially infrastructure development.

9.6.5 Re-education and Re-Orientation Programmes

There has been growing concern regarding the roles of development agencies, urban planners and government officials regarding their attitude and bureaucratic approach to infrastructure development. In order to improve the standard of public service and to solve the problems of inadequate infrastructure most especially in the suburban areas, there is need to re-educate and re-orientate government officials regarding the use of participatory development theory, the importance of inter-agency collaboration and good communication. Furthermore, it will be worthwhile for all levels of government in Nigeria to sponsor staffs to attend conferences and continuing professional development (CPD) practices to further broaden their knowledge and skills so that they have up to date knowledge of new innovations and development in their area of expertise.

Government should embark on collective training of strategic target groups such as leaders of the various community organisations in the use of participatory development approach. The training should not be limited to communities benefitting from CDD programmes as this will enhance the discharge of their roles as stakeholders and will also assist in good record keeping that can serve as data for policy makers. Government should strengthen existing community based organisations and also foster the development of new ones.

9.6.6 Embarking on Research and Feasibility Studies

It is also important that there is a linkage between the academic research institutes, government agencies and policy makers in order to contribute towards progressive infrastructure development. Hansen and Lehmann (2006, p. 1124) consider the university and research institutes as development hubs *"where connect diverse stakeholders and provide creative meeting points for different types of knowledge*". Academics spend more time conducting researches and engages more with the reality faced by local communities as they are often the field and focus of many of their endeavours. They are therefore in a good position to educate government officials, planners and policy maker, about the knowledge they acquired through research to provide solutions to inadequate infrastructure provision. Another important role of academic institutions is to bridge the gap between policy makers, development agencies and the local communities by interpreting policies and connecting local capabilities and ideas of various stakeholders' especially local people with government initiatives provided by the institutional framework.

It is very important that local people are involved in planning and implementation of infrastructure projects so as to avoid the rejection of projects by local community. Government agencies should always conduct baseline study which should be updated frequently. This will serve as data for resource allocation and policy formulation and will also increase access to local information which will subsequently be shared between government agencies which in turn assist in determining the actual needs of the local community.

9.6.7 Unbundling of Responsibilities of Regulatory Agencies

There is clearly a need to separate the roles of regulatory agencies from delivery of services in order to reduce conflict of interest and also increase their performances. Their regulatory roles should be fulfilled by separate organisations in order to increase their authority and clarity. Bundling of functions of government agencies weakens the institutional framework which according to Cremers *et al.* (2005) is a major cause of failures in many service delivery. Poor institutional arrangement for planning, construction and management, as well as limited capacity of regulatory institutions to coordinate, harmonise and manage other stakeholders is preventing provisions of

adequate infrastructure delivery. Furthermore, unbundling of responsibility improves the discharge of responsibility and accountability among service providers.

9.7 Areas for Further Research

This thesis has identified and analysed relevant issues relating to infrastructure development and community participation which include the adequacy of infrastructure development, impact of community participation and main problems faced by local communities and the government agencies involved in infrastructure delivery. It has not been possible to address all the various aspect or classification of infrastructure development. The research focused more on assessing the influence of community participation on infrastructure development through the lenses of the local community. Further research can assess the impact of community participation from the government agencies perspective and can further analyse factors hindering collaboration and partnership among infrastructure development agencies. Furthermore, there is need for the assessment of the impact of community participation on other types of infrastructure as this research only focused on its impact on road and water infrastructure.

Also institution framework was considered and analysed within the infrastructure development process. It is a wider scope than was assessed in this research, further research can be carried out on the impact of institution framework on infrastructure delivery and can be extended to other classification of infrastructure development as explained in chapter 2 (subsection 2.2.2). It will also be worthwhile to evaluate impact of introduction of technology e.g. information technology and geographical information system on infrastructure delivery. Lastly regarding the issue of collaboration between government agencies and CBO identified in this research, a study can be carried out to assess the impact of stakeholder's collaboration on effective delivery of infrastructure in Nigeria. This could provide a better understanding to participatory development process.

9.8 Summary and Conclusion

This study has generally answered the what, which, how and why questions in the provision of infrastructure development and by questioning the influence of community participation on infrastructure development, this thesis has made clear some of the

issues surrounding the process and delivery of infrastructure development in suburban areas of a medium sized city. The study identified lack of funds and, poor institutional framework, and that lack of coordination is hindering adequate provision of infrastructure development and involvement of local communities in the decision-making process.

The study further established that inadequacy of basic infrastructure such as road and water is the major factor among several others that is influencing local community participation in infrastructure development. The decision to be involved in community participation is based on the choice of participants. However, many residents of suburban communities in Akure city are forced to be financially committed towards community projects albeit of poor quality. This study emphasised the need for a participatory development approach as a way of improving the provision of adequate infrastructure development and improving community self-help projects. Nevertheless, effective collaboration and communication between all stakeholders will enhance the use of participatory development as a substantive approach to infrastructure in Nigeria. Participants must always be ready to agree on consensus development and infrastructure development needs to be an inclusive plan with the participation of all the various stakeholders.

Furthermore, this study established that the infrastructure needs of local communities transcend beyond their immediate neighbourhood because they work, trade and engage in other activities outside their communities. It is vital to extend a participatory development approach to all government agencies that are involved in infrastructure development in Akure city including federal-based, state-based and local-based agency. This is because their responsibility sometimes extends beyond their domain and cannot be restricted to administrative boundaries of each development agency which justifies the need for collaboration, partnership and cooperation. Based on this reality and the importance of infrastructure development, it would be practical to conclude this research by acknowledging that community participation does improves the availability, accessibility and affordability of road and water infrastructure development in Akure city. However, there is need for improvement of the quality of local infrastructure provided by CBOs and these can only be achieved with availability of financial assistance to the local community organisations in order to ensure the quality and sustainability of community self-help projects.

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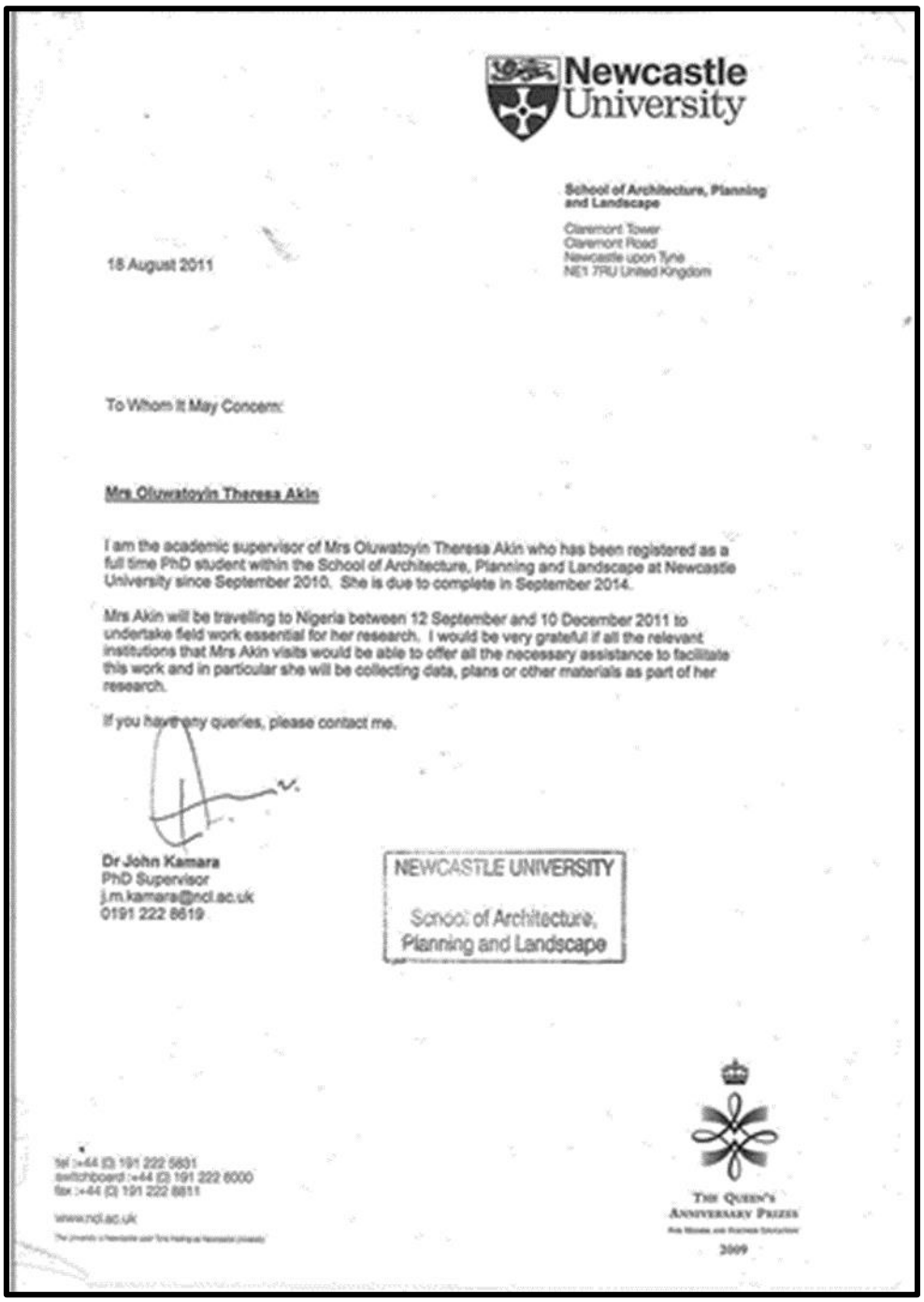
Appendices

Appendix A. Letter of Introduction



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Claremont Tower
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Newcastle upon Tyne
NE1 7RU United Kingdom

18 August 2011

To Whom It May Concern:

Mrs Oluwatoyin Theresa Akin

I am the academic supervisor of Mrs Oluwatoyin Theresa Akin who has been registered as a full time PhD student within the School of Architecture, Planning and Landscape at Newcastle University since September 2010. She is due to complete in September 2014.

Mrs Akin will be travelling to Nigeria between 12 September and 10 December 2011 to undertake field work essential for her research. I would be very grateful if all the relevant institutions that Mrs Akin visits would be able to offer all the necessary assistance to facilitate this work and in particular she will be collecting data, plans or other materials as part of her research.

If you have any queries, please contact me.

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Date: 11th October, 2011

The Project Coordinator
Ondo State Community
Based Urban Development
Akure.

RECEIVED
ONSG STATE GROUP
11 OCT 2011
DIST. SYSTEMS ACCTNG UNIT
AKURE-AKURE

Dear Sir,

LETTER OF INTRODUCTION

The bearer, Mrs. Akin Oluwatoyin T. is a staff of the department and currently undergoing a PhD program in Newcastle University on research topic **"Impact of Community participation on Infrastructural Development in Nigeria *(Case Study of Akure)*"**. She would be requesting your assistance on information on the various community projects been executed in your ministry.

This work is purely for academic purpose but may go a long way to facilitate policy formulation/implementation on infrastructural development in Akure community and all information's provided by your ministry would be treated with utmost confidentiality.

Please accord her all the necessary support and assistance needed to make this work successful. We would be very much delighted if the researcher is given access to some of the various publications showing projects embarked upon by the ministry particularly those through communal efforts.

Thank You.

Yours Faithfully,

HEAD
DEPT. OF ESTATE MGT.
UNIVERSITY OF TECH.
AKURE

Dr. M.O. Bello

Appendix B. Questions for Resident's Interviews

This interview survey is part of a research on **Impact of Community Participation on Infrastructure Development in Nigeria.** All information provided will be treated in strict confidence for academic purpose only.

Thank you.

Akin Oluwatoyin
PhD Research Candidate
School of Architecture, Planning & Landscape
Newcastle University
United Kingdom.

SECTION 1: SOCIO-ECONOMIC STATUS

- ✓ Name of Community ----------
- ✓ Gender of the respondent----------
- ✓ Marital Status:----------
- ✓ Employment Status:----------
- ✓ What is your ethnic group? Please specify
- ✓ What is the most important factor that attracted you to live in this community?

SECTION 2: LEVEL AND BENEFIT OF PARTICIPATION

- ✓ Are you conversant with the word community participation in community development?
- ✓ Are you a member of any organization?
- ✓ Do you usually participate in the development of your community?
- ✓ Do you attend the community meeting? (Landlord Association in your area)
- ✓ Do you collaborate with other community members?
- ✓ What is your attitude towards participation in Infrastructure development?
- ✓ What level/stage are the people of this community allowed to participate in decision making?
- ✓ How often do people of this community come together to participate in the development of the community?
- ✓ Who controls the development programmes of this community?
- ✓ How can you rate the attitude of the residents/members of your CBO towards participation in development projects?
- ✓ What are the factors that influences your participation?

SECTION 3: SOURCE OF FUNDING

- ✓ How is fund generated for the projects?
- ✓ If yes, how much do you contribute?

- ✓ Is the levy uniform rate or prorate?
- ✓ Frequency of the contribution?
- ✓ What happens to defaulters?
- ✓ Do you get to know how the money is being used?
- ✓ Does your CBO give financial account?

SECTION 4: IMPACTS OF COMMUNITY PARTICIPATION

- ✓ What are problems faced in the course of carrying out development projects using community participation approach?
- ✓ In your own opinion, do you think community participation exercise helps in increasing adequacy of infrastructure provision?
- ✓ What is the state of the local road network in your community using the assessment index below?
  Please tick the appropriate option in the table below.

Condition Assessment	**Characteristics**	**Tick the appropriate option**
Excellent	Free of potholes, peel offs, and cracks.	
Good	Very few pot holes and peel offs	
Fair	Some potholes and peel-offs that could be refilled to make traffic flow better.	
Poor	Potholes and peel offs at almost every kilometer; the shoulder of the road had eroded off.	
Very Poor	Many potholes with gullies and ditches, major cracks (longitudinal and transverse), depressions, broken down bridges, the shoulder, the road had eroded off.	

- ✓ Do you pay your tenement rates? (If no, why?)
- ✓ Do you have water meter?
- ✓ Do you pay water bills?
- ✓ How much do you spend on water bill average?
- ✓ What is your major sources of water provision?
- ✓ What is the uses of the water in your residence?
- ✓ What is the distance to your source of domestic water?
- ✓ What is the major source of drinking water and what is the distance to sources?
- ✓ Have you ever had water infection and if so what type and what do you think caused it?
- ✓ Do you think community projects are managed better than government's projects? (If yes why?)
- ✓ What benefits did you derived from joining the local CBO and for participating?

Appendix C. Main Question for Interviews with Government Officials

1) Mode of operation and process

2) Source of income for projects

3) Projects embarked on within the last two Years

4) Levels of community involvement in these projects

5) Status of these projects whether completed or on-going.

6) Management of the infrastructure and sustainability

7) Problems encountered

Appendix D. Main Questions for Focus Groups

Title: Impact of Community Participation on Infrastructure Development

(1) COMMUNITY BASED ORGANISATION (FOCUS GROUP 2 and FOCUS GROUP 3)

- **Perception of Community Participation**

1) What is community?
2) Who is a community member?
3) What do understand about community participation?
4) Are there any obligations that qualify a resident as belonging to a particular community?
5) How do you choose your executives?
6) How do you disseminate information?
7) Knowledge or information about other CBO groups operating within their communities and their programmes or activities?
8) Do you consult you other CBOs in your community like the Market women to ask to help with community projects?

- **LEVEL OF PARTICIPATION**

9) How do you arrive at decision regarding community projects?
10) Are you members actively involved? What about women? Is there any female among the executive?
11) Leadership at any levels across the organization involved in infrastructure development in Akure
12) Are you aware some of your members are dissatisfied?
13) Is there any motivation from political parties e.g. councillors, representative in the ward/constituencies in your area? Are they involved and also do you inform them of any programme or your activities and what has been their response?
14) Is there a community directory or register?
15) How effective is collaboration between your executives and other members
16) Is there any partnership between the CBO and government agencies?

17) Did you inform the government through the appropriate agencies about your projects (water and road)?
18) Do the government consult you before or after about their projects?
19) Do you have a way you can complain if you are not satisfied with any projects or contractor's work?

❖ **SOURCES OF FUNDS**

20) How have the communities generating funds for projects initiated by them?
21) Has there been any help from the government?
22) The government estates are all supposed to enjoy good infrastructure what has been the true state of water and road infrastructure within this GRA's

(2) FOCUS GROUP 1: WOMEN ASSOCIATION (FOCUS GROUP 1).

23) How are the women in the community involved?
24) Does your husband allow you join in the community work and what level?
25) Why do you have a separate association?
26) What is the benefit of community participation to you as a woman?
27) What is the benefit of the women association?

(3) Academic Focus Group Discussion (Focus Group 4)

Focus Group Discussion with the Academic Community (Federal University of Technology Akure, Ondo State Nigeria) Date: 2nd of November, 2011

Topic: The Impact of Community Participation on Infrastructure Development

"Does community participation improves infrastructure development "

1. What is a Community?
2. What is Community Participation?
3. What are the factors influencing Community Participating?
4. What is the causes of Inadequate Infrastructure Provision?
5. Are the levels of participation and sources of funding for communal infrastructure projects?
6. What are the factors that determine stakeholder level of participation?

7. Does community participation lead to empowerment and improve the capacity for collective action and accessibility to infrastructure services
8. Does community participation improve infrastructure delivery, management and sustainability?
9. How can the quality of infrastructure development be improved?
10. What is the role/relationship of the academic community with the community and the development agencies?

Appendix E: Coding for Data Analysis

Focus Group Discussion with Asuwamo Landlady Association, Asuwamo Community

Date: 21st of September, 2011

Topic: Women involvement in community participation and the impact on infrastructure Development

Table 1: Coding for Asuwamo Women Organisation

S/N	AGE	STATUS	CODING
1	50	President	FG1:1
2	45	Vice-President	FG1:2
3	40	Secretary	FG1:3
4	42	Financial Secretary	FG1:4
5	53	Member	FG1:5
6	27	Member	FG1:6
7	35	Member	FG1:7
8	41	Member	FG1:8
9	40	Member	FG1:9
10	33	Member	FG1:10
11	45	Member	FG1:11

FOCUS GROUP 2

FOCUS GROUP DISCUSSION WITH CBO COMMITTEE AWULE COMMUNITY:

Date: 25th September, 2011

Table 2: list coding for community leaders

S/N	STATUS	GENDER	CODING
1	Chairman	Male	FG2:1
2	Vice-chairman (head of work committee)	Male	FG2:2
3	Financial Secretary	Male	FG2:3
4	Secretary	Female	FG2:4
5	resident	Female	FG2:5
6	resident	Male	FG2:6

Focus Group 3: Resident Focus Group Discussion with CBO Committee of Fatuase Residential Estate, Obaile: Date: 4th of October, 2011

Table 3: list coding for focus group 3

S/N	STATUS	GENDER	CODING
1	Chairman 1st settler)	Male	FG3:1
2	Vice-Chairman	Male	FG3:2
3	Secretary	Male	FG3:3
4	Resident	Male	FG3:4
5	Resident	Male	FG3:5

FOCUS GROUP 4: Focus Group Discussion within the Academic Community (Federal University of Technology Akure, Ondo State Nigeria): Date: 2nd of November, 2011

"Does community participation improves infrastructure development?"

Table 4: List of coding for Academic Focus Group

S/N	STATUS	DEPARTMENT	CODING
1	Professor	Urban & Regional Planning	FG4:1
2	Head of Department	Civil Engineering	FG4:2
3	Lecturer	Urban & Regional Planning	FG4:3
4	Lecturer	Architecture	FG4:4
5	Lecturer	Estate Management	FG4:5
6	Lecturer	Estate Management	FG4:6
7	Lecturer	Electrical & Electrical	FG4:7
8	Director	Physical Planning Unit, FUTA	FG4:8

TABLE 5: LIST OF CODING FOR RESIDENTS INTERVIEW

S/N	CBOs	GENDER	AGE	CODING	TYPE
1	Odopo layout Ijoka	M	60	RI:1	Face to face
2	Apatapiti	F	70	RI:2	Face to face
3	Asuwamo	F	61	RI:3	Face to face
4	Odopo layout Ijoka	M	19	RI:4	Face to face
5	Asuwamo	F	50	RI:5	Face to face
6	Elekinran	M	61	RI:6	Face to face
7	Asuwamo	M	50	RI:7	Face to face
8.	Apatapiti	F	32	RI:8	Face to face
9.	Obaile ZN 1	M	69	RI:9	Face to face
10.	Obaile ZN1	M	59	RI:10	Face to face
11.	Obaile ZN4	M	60	RI:11	Face to face
12	Alaba	F	55	RI:12	Face to face
13	Ilotin	M	79	RI:13	Face to face
14	Elekinran	F	39	RI:14	Face to face
15	Asuwamo	M	50	RI:15	Face to face
16	Awule	F	51	RI:16	Face to face
17	Fatuase	M	52	RI:17	Face to face
18	Fatuase	M	22	RI:18	Face to face
19	Fatuase	M	62	RI:19	Face to face
20	Ilotin	F	57	RI:20	Face to face
21	Abusoro	M	65	RI:21	Face to face
22	Abusoro	M	56	RI:22	Face to face
23	Abusoro	M	74	RI:23	Face to face
24	Apatapiti II	F	61	RI:24	Face to face
25	Apatapiti	F	38	RI:25	Face to face
26	Apatapiti	M	65	RI:26	Face to face
27	Ilotin	F	69	RI:27	Face to face
28	Alaba	M	60	RI:28	Face to face
29	Omoniyi	M	69	RI:29	Face to face
30	Ilotin	F	36	RI:30	Face to face
31	Odopo layout Ijoka	M	58	RI: 31	Face to face
32	Odopo layout Ijoka	F	75	RI:32	Face to face
33	Awule	M	42	RI:33	Face to face
34	Ilotin	M	42	RI:34	Face to face
35	Apatapiti II	F	40	RI:35	Face to face
36	Apatapiti II	M	55	RI:36	Face to face
37	Asuwamo	M	61	RI:37	Face to face
38	Elekinran	M	50	RI:38	Face to face
39	Elekinran	M	61	RI:28	Face to face
40	Awule	F	33	RI:40	Face to face
41	Ilotin	M	42	RI:41	Face to face
42	Omoniyi	F	59	RI:42	Face to face
43	Alaba	M	66	RI:43	Face to face
44	Asuwamo	F	40	RI:44	Face to face
45	Elekinran	M	45	RI:45	Written/filled form
46	Awule	F	35	RI:46	Written/filled form
47	Asuwamo	F	41	RI:47	Written/filled form

48	Alaba	M	59	RI:48	Written/filled form
49	Alaba	M	42	RI:49	Written/filled form
50	Ilotin	F	71	RI:50	Written/filled form
51	Omoniyi	M	70	RI:51	Written/filled form
52	Apatapiti	M	43	RI:52	Written/filled form
53	Apatapiti II	M	51	RI:53	Written/filled form
54	Apatapiti II	M	45	RI:54	Written/filled form
55	Awule GRA	M	50	RI:55	Written/filled form
56	Fatuase	F	62	RI:56	Written/filled form
57	Abusoro	M	60	RI:57	Written/filled form
58	Odopo layout Ijoka	M	60	RI:58	Written/filled form
59	Fatuase	M	49	RI:59	Written/filled form
60	Abusoro	M	62	RI:60	Written/filled form

TABLE 6: LIST OF CODING FOR COMMUNITY LEADERS

COMMUNITY	CBO's	POST	CODE
Aba-Oyo - FUTA	Alaba layout	Chairman	CL:1
		Treasurer	CL:2
	Apatapiti	Chairman	CL:3
		Secretary	CL:4
	Elekinran	Chairman	CL:5
		Treasurer	CL:6
Ijoka	Ilotin	Chairman	CL:7
		Secretary	CL:8
	Odopo	Chairman	CL:9
		Treasurer	CL:10
	Abusoro	Chairman	CL:11
Omoniyi	Omoniyi estate	Chairman	CL:12
		Treasurer	CL:13
Obaile	Obaile	Chairman	CL:14
		Secretary	CL:15
	Fatuase	Chairman	CL:16
		secretary	CL:17
Awule	Awule GRA	Chairman	CL:18
		Financial secretary	CL:19
	Asuwamo	Chairman	CL:20
		Secretary	CL:21
	Apatapiti	Chairman	Cl: 22
		Treasurer	CL: 23

Table 7. Government agencies in charge of infrastructure development in Akure

S/N	NAME OF AGENCY	DESIGNATION	INFRASTRUCTURE PROJECTS
1.	**Akure South Local Government**	Chairman **(GA:1)**	- **All infrastructures** Involved in the provision of all infrastructure. Road Electricity & Water projects
		Director of Works & Services **(AKSLG, GA:2)**	
		Supervisory Counsellor for Community Development **(AKSLG, GA:3)**	
2	**Ondo State Ministry of Works**	Deputy Director of Works, **(OSMW, GA:5)**	**Road**
		Chief Resident Engineer **(OSMW, GA:6)**	**Road**
3	**Ondo State Ministry of Land and Housing Services**	Principal Estate Officer **(OSMLHS, GA:7)**	- Oversees the provision and management of all the infrastructure provision in Government Residential Estate
		Assistant Director Land Allocation Section **(OSMLHS, GA:8)**	
		Director of Lands **(OSMLHS, GA:9)**	
4.	**Ondo State Ministry of Physical Planning and Urban Development**	Director of Development and Planning (State Chairman, Nigerian Institute of Town Planners **(OSMPPUP, GA:10)**	- Physical planning of Akure Layouts of Akure residential areas
		Monitoring & Evaluation Officer **(OSMPPUP, GA:11)**	
5.	**Ondo State Ministry of Community Development and Cooperatives**	Commissioner **(MCDC, GA:12)**	**All infrastructures** (Road, Electricity and Water etc.)
		Community Development Officer **(MCDC, GA:13)**	
6.	**Ondo State Community Based Urban Development Projects**	Project Coordinator **(CBUDP, GA:14)**	- **All infrastructures** (Road, Electricity and Water etc.) Involved in provision of all infrastructure project within the state (Road, Electricity and Water etc.)
		Project Development Officer **(CBUDP, GA:15)**	
7	**Ondo State Property Development Corporation**	Director of Lands **(OSPDC, GA:16)**	Oversees the provision and management of all the infrastructure provision in Government Residential Estate
		Deputy Director of Lands **(OSPDC, GA:17)**	
8	**Ondo State Water Corporation**	Project Supervisor **(OSWC, GA:18)**	**Water** Projects
9	**Ondo State Community and Social Development Agency**	Operation Manager **(CSDA, GA:19)**	- **All infrastructures** (Road, Electricity and Water etc.) Involved in provision of all infrastructure project within the state (Road, Electricity and Water etc.)

Appendix F: CDD Project Application Form

Form A: Application No.....

Ondo State Community and Social Development Agency

COMMUNITY DEVELOPMENT PLAN APPLICATION FORM
(TO BE FILLED IN TRIPLICATE)

This form should be filled out only after the whole community, including all social groups, participates in discussing their problems, solution, and their highest priority project to be assisted by the State Agency.

1. Name of Community: [illegible]

2. Local Government Area [illegible]

3. Contact address (for mailing including GSM number): [illegible]

[illegible]

4. **Population and Size of Project Area**:

(a) Total population of the community: 3,500 Size of Community [illegible]

(b) No. of Male: 1550 Female : 1950 Vulnerable Group [illegible]

(C) Vulnerable Group

Elderly	55
Widows	134
Orphans	15
Disabled	05
Others	47

5. **Identification of Community Problems:** List all the problems identified by the Community:

S/N	Problems	Causes	Effects	Coping mechanism	Possible solution
i.	Inadequate Health facility	- Inadequate health personnel - Insufficient nurses - Lack of drugs - Lack of equipment	- Premature death - Infant and maternal mortality - Easily to poverty	- Uses of herbs - Patronising prayer houses - Self medication	- Construction of more health facility - Provision of nurses - Provision of drugs and equipment
ii.	Lack of portable water	- No source of water - Erosion destroy our streams	- Cause water borne diseases	- Trekking to long distance to fetch pawpaw water - Buying of satchet water	- Construction of bore holes
iii.	Inadequate classroom in our primary school	- dilapidated building - Inadequate furnitures - Lack of learning equipments	- Illiteracy - Overcrowding of classroom	- Trekking to long distance for quality education - Uses of parents Nursery/Primary	- Construction of additional classroom - Provision of sufficient teachers - Provision of learning equipment
iv.					
v					

2

6. **Identification of Priority needs of Community by Groups:** List the Priority projects of the Community to solve the most pressing problems

S/N	Community Group	Intervention Identified	Sector	Estimated Cost N000
1	Vulnerable	Provision of mobile Health facilities	Health	2,408,148.50
2	Women	Portable Water	Water	3,307,500
3	Youth	Provision of add Friend classroom	Education	3,859,065
4	Men			

7. **List the Final Priority Projects in the CDP for support by the Agency (note guidelines):**

... Micro projects — Estimated Costs

(a) Completion of Community health Centre ₦2,408,143.

(b) Construction of 3 hand Pumped borehole ₦3,307,5

(c) Construction of A block of 4 classrooms. ₦3,85

(d)

8. Please answer the following questions for each of the microprojects listed above

Item	Microproject 1	Microproject 2	Microproject 3	Microproject 4
Name of Project	Construction of health Centre	Construction of 3 hand Pumped bore hole	Construction A block of four classrooms	
Sector	Health	Water	Education	
Project content	Completion of Community health Centre VIP Toilet Incinerator, Placenta Pit	3 hand Pumped bore hole	four classrooms Incinerator VIP toilet students Locker and chairs Teacher table & chair	
Is there existing skill to execute the project? If no, how do you intend to deliver?	Yes, there are artisan on the Community	No, the use of Service Provider	Yes there are artisan on the Community	
What are the expected benefits from the micro-project?	Good health service, delivery reduction on infant and maternal mobility	eliminate the cost of buying Safe hot water, Reduction in waterborne diseases outbreak.	Conducive learning environment Increase in literacy level increase on no of enrolment	

List the likely negative effects of the project on the environment.	Environmental Pollution from Clinical waste, human waste and Placenta	Stagnant flooding from wastewater, water mosquito breeding	Environmental Pollution from students waste	
List the likely negative effect of the environment on the project.	Flooding, wind could blow off the roof	Nervisible effect	Flooding, wind could blow off the roof	
State the possible solutions to the negative effects on the environment	Construction of VIP toilets incinerator and placenta pit	construction of water drains regular flushing of drains to avoid mosquito breeding	Construction of VIP Toilet	
State the possible solutions to the negative effects of the environment on the project	Construction of water drains round the hall planting of Trees		Construction of water drains round the hall planting of trees	
Possible cost of environmental mitigation effects	₦174,00 = for construction of VIP Toilet planting trees	₦2 for construction of water drains		
How will the community monitor the impacts of the project on the environment?	By sighting seeing making sure that environment is free from pollution	By sighting seeing	By ogoing seeing making sure the environment is free from pollution	
Community contribution 1. Material Sand Stones Bricks Inputs 2. Labour 3. Cash 4. Inputs 5. Others				

Community Participation: How did the community, (including women, youth and vulnerable), participate in choosing this project as their priority? Attach minutes of meetings, attendance lists or other evidence.	Through Participatory Need Appraisal (PNA). The Community Members were divided into four major Groups, Vulnerable, Youth, Women and Men. They identified their needs and prioritized it

10. **Maintenance**: What has the community already done to maintain existing facilities?. Community to attach details:

Through community effort the community builds in the Centre to lintel level. Ready waiting to roof

11. **Sustainability:** What would the community agree to do to operate and maintain the proposed facility itself after the project is completed? Attach evidence, if any. ? (for all micro-projects). Community to attach details:

The community would be using together once we complete it but the needs would be further Community will be levied to repair any broken area in the facility

2. **CPMC Election:**

How was the committee elected?	Through election by Community Members		
When was it elected?			
Who elected the CPMC?	Community Members		
Who conducted the elections (give names, positions and signatures?	*Name*	*Position*	*Signature*
Community Development Associates	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]

13. CPMC Members. (List Committee Members who would be responsible for the CDP and/or project. This must consist at least 30% Women).

Position	Name	Sex	Signature	Village	GSM No (if any)
Chairperson					
Vice Chairperson					
Secretary					
Asst. Secretary					
Treasurer					
Financial Secretary					
P.R.O					
Auditor					

Note: List of standing committees to be attached i.e. Procurement Committee, Operations/Maintenance Committee and Supervision/Monitoring & Evaluation Committee. Signatories should also be attached.

14. Were there any other facilitators other than Operations Officers (OOs) who assisted with planning for the project or filling out this application, but are not members of the project committee? If yes, list their names.

S/No	Name	Position	Signature
1			
2			
3			
4			

15. **Signing of Application:**

Date _____ Name _____ Sign _____

Date _____ Name _____ Sign _____

Please kindly submit three (3) copies of this form to the Local Government Desk Office.

Section B - to be completed by the LGRC Desk Officer and LGRC after review. The Desk officer shall inform the submitting CPMC of the date of Review:

16. Date submitted to LGDO: _____

17 Signature of LGDO: _____

18. LGRC Comments/Review

(a) Are priority projects consistent with LGA development goals? YES

(c) Are there any changes recommended and agreed with CPMC?

NIL

(c) LGRC recommends CDP. Yes/No YES Why?

The proposed project will enhance the Community Structural by the Community people.

(d) What support will LGA give to the CPMC and micro projects during and after project execution?

The LGA will assist in the area of staffing and security. The LGA will also constantly visit the project during and after the completion. It will be monitored effectively completion

LGRC Chairman Name _____ Sign _____ Date _____

LGRC Secretary Name ALADEVIKA, A S. Sign _____ Date 27/07/11

Two copies of the completed signed and stamped document is to be returned to the CPMC by the LGDO after the LGRC review Meeting.

The CPMC will submit the two copies to the ODCSDA for further processing.

List of attachments:

1. Details of Community Contribution
2. Maintenance Plan
3. Sustainability Plan
4. Minutes and Attendance at Meeting(s)
5. PRA Report
6. List of Authorized Signatories to CPMC Account
7. List of Sub-committees
8. Bank Statement
9. CPMC Registration Certificate with LGA.
10. Schedule of Requirements
11. Project Design/Plan where necessary